#### COMMONWEALTH OF KENTUCKY

## BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

REVIEW OF FEDERAL COMMUNICATIONS	)	
COMMISSION'S TRIENNIAL REVIEW ORDER	)	CASE NO.
REGARDING UNBUNDLING REQUIREMENTS	)	2003-00379
FOR INDIVIDUAL NETWORK ELEMENTS	)	

# AT&T'S OBJEFCTIONS AND RESPONSES TO BELLSOUTH'S FIRST SET OF INTERROGATORIES (1-83)

### **PUBLIC VERSION**

AT&T Communications of the South Central States, LLC (hereinafter "AT&T"), pursuant to the Order Establishing Docket, Procedure and Schedule entered by the Kentucky Public Service Commission (hereinafter "Commission") and Kentucky Rules of Practice and Procedure, hereby submits the following objections, both general and specific and the following Responses to BellSouth Telecommunications, Inc.'s (hereinafter "BellSouth") First Set of Interrogatories (Nos. 1-83) to AT&T, served on October 10, 2003. Should additional responsive information be discovered at any time prior to hearing, AT&T reserves the right to supplement, revise, and/or modify these Responses.

#### **OVERVIEW**

These following objections are preliminary in nature. AT&T reserves the right to supplement, revise, and/or modify these objections should additional grounds for objection be discovered as AT&T prepares its responses to any discovery or at any time prior to hearing.

#### **GENERAL OBJECTIONS**

AT&T makes the following general objections to the Interrogatories which will be incorporated by reference into AT&T's specific responses to BellSouth's First Set of Interrogatories.

### 1. Definitions

- A. AT&T objects to the lengthy "Definitions" section of BellSouth's First Set of Interrogatories to AT&T to the extent that such terms are overly broad, unduly burdensome, irrelevant, oppressive and not reasonably calculated to lead to the discovery of admissible evidence. Furthermore, AT&T objects to the "Definitions" section to the extent that it utilizes terms that are subject to multiple interpretations, but are not properly defined or explained for purposes of these Interrogatories.
- B. AT&T objects to the "Definitions" section of BellSouth's First Set of Interrogatories to AT&T to the extent that the definitions operate to include the discovery of information protected by attorney/client privilege, the work product doctrine, or any other applicable privilege.
- C. AT&T objects to the "Definitions" section of BellSouth's First Set of Interrogatories to AT&T to the extent that the definitions operate to include the discovery of information and/or materials containing the mental impressions, conclusions, opinions or legal theories of any attorney or other representative of AT&T concerning the subject of the proceeding and prepared and developed in anticipation of litigation.
- D. AT&T objects to the "Definitions" section of BellSouth's First Set of Interrogatories to AT&T to the extent that the definitions operate to impose discovery obligations on AT&T inconsistent with, or beyond the scope of, what is permitted under the *Orders* issued in this proceeding on October 2, 2003 and November 4, 2003 by the Kentucky Public Service Commission and other applicable Kentucky law.
- E. AT&T objects to the "Definitions" section of BellSouth's First Set of Interrogatories to AT&T to the extent that the definitions operate to seek discovery of matters other than those subject to the jurisdiction of the Commission pursuant to the FCC's Triennial Review Order and other applicable Kentucky law.

- F. AT&T objects to the "Definitions" section of BellSouth's First Set of Interrogatories to AT&T to the extent that the Interrogatories purport to seek disclosure of information that is proprietary confidential information or a "trade secret" pursuant to Kentucky law.
- G. AT&T objects to the definitions of "you" and "your," "AT&T," and "person" to the extent that the definitions include natural persons or entities which are not parties to this proceeding, not subject to the jurisdiction of the Commission, and not subject to the applicable discovery rules. Subject to the foregoing, and without waiving any objection, general or specific, unless otherwise ordered, responses will be provided on behalf of AT&T Communications of the South Central States, LLC, which is a certificated carrier authorized to provide regulated communications services in Kentucky and which is a party to this proceeding.

#### 2. Instructions

- A. AT&T objects to the "General Instructions" section of BellSouth's First Set of Interrogatories to AT&T to the extent that the "instructions" operate to impose discovery obligations on AT&T inconsistent with, or beyond the scope of, what is permitted under the *Orders* issued in this proceeding on October 2, 2003 and November 4, 2003 by the Kentucky Public Service Commission and other applicable Kentucky law.
- B. AT&T objects to the "General Instructions" section of BellSouth's First Set of Interrogatories to AT&T to the extent that the "instructions" operate to seek disclosure of the mental impressions, conclusions, opinions, or legal theories of any attorney or other representative of AT&T concerning the subject of litigation without the requisite showing under Kentucky law.
- C. AT&T objects to the "General Instructions" section of BellSouth's First Set of Interrogatories to AT&T to the extent that the "instructions" operate to seek disclosure of "all" information in AT&T's "possession, custody or control" and to the extent that said "instruction" requires AT&T to provide information or materials beyond its present knowledge, recollection or possession. With respect thereto, AT&T has employees located in many different locations in Kentucky and other states. In the course of conducting business on a nationwide basis, AT&T creates numerous documents that are not subject to either the Commission or FCC record retention requirements. These documents are kept in numerous locations and frequently are moved from location to location as employees change jobs or as business objectives change. Therefore, it is impossible for AT&T to affirm that every responsive

document in existence has been provided in response to all Interrogatories. Instead, where provided, AT&T's responses will provide all information obtained by AT&T after a reasonable and diligent search conducted in connection with those Interrogatories. Such search will include only a review of those files that are reasonably expected to contain the requested information. To the extent that the "instructions" require more, AT&T objects on the grounds that compliance would be unduly burdensome, expensive, oppressive, or excessively time consuming to provide such responsive information.

## 3. General Objections to Interrogatories

- A. AT&T objects to BellSouth's First Set of Interrogatories to AT&T to the extent that the Interrogatories are overly broad, unduly burdensome, irrelevant, oppressive and not reasonably calculated to lead to the discovery of admissible evidence.
- B. AT&T objects to BellSouth's First Set of Interrogatories to AT&T to the extent that the Interrogatories purport to seek discovery of information protected by attorney/client privilege, the work product doctrine, or any other applicable privilege.
- C. AT&T objects to BellSouth's First Set of Interrogatories to AT&T to the extent that the Interrogatories purport to seek discovery of information and/or materials containing the mental impressions, conclusions, opinions or legal theories of any attorney or other representative of AT&T concerning the subject of the proceeding and prepared and developed in anticipation of litigation.
- D. AT&T objects to BellSouth's First Set of Interrogatories to AT&T to the extent that the Interrogatories purport to impose discovery obligations on AT&T inconsistent with, or beyond the scope of, what is permitted under the *Orders* issued in this proceeding on October 2, 2003 and November 4, 2003 by the Kentucky Public Service Commission, and applicable Kentucky law.
- E. AT&T objects to BellSouth's First Set of Interrogatories to AT&T to the extent that the Interrogatories purport to seek discovery of matters other than those subject to the jurisdiction of the Commission pursuant to the FCC's Triennial Review Order and other applicable Kentucky law.
- F. AT&T objects to BellSouth's First Set of Interrogatories to AT&T to the extent that the Interrogatories purport to seek disclosure of information that is proprietary confidential information or a "trade secret" pursuant to Kentucky law.

- G. AT&T objects to all Interrogatories which require the disclosure of information which already is in the public domain or otherwise on record with the Commission or the Federal Communications Commission ("FCC").
- H. AT&T objects to BellSouth's First Set of Interrogatories to AT&T to the extent that the Interrogatories seek information and discovery of facts known and opinions held by experts acquired and/or developed in anticipation of litigation or for hearing and outside the scope of discoverable information under Kentucky law.
- I. Pursuant to the *Orders* issued in this proceeding on October 2, 2003 and November 4, 2003 by the Kentucky Public Service Commission, the Triennial Review Order, and applicable Kentucky law, to the extent that BellSouth's Interrogatories seek specific financial, business or proprietary information regarding AT&T's economic business model, AT&T objects to providing or producing any such information on the grounds that those Interrogatories presume that the market entry analysis is contingent upon AT&T's economic business model instead of the hypothetical business model contemplated by the Triennial Review Order.

# **SPECIFIC RESPONSES TO INTERROGATORIES**

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 1:

Identify each switch owned by Company that Company uses to provide a qualifying service anywhere in Kentucky, irrespective of whether the switch itself is located in the State and regardless of the type of switch (e.g., circuit switch, packet switch, soft switch, host switch, remote switch).

Response:

To the extent that the definitions of "qualifying service" and "non-qualifying service" as defined by BellSouth in BellSouth's First Set of Interrogatories to AT&T are different than the definitions of "qualifying" and "non-qualifying" service as defined in 47 C.F.R. § 51.5, this interrogatory is vague. Specifically, 47 C.F.R. § 51.5 defines a "qualifying service" as "a telecommunications service that competes with a telecommunications service that has been traditionally the exclusive or primary domain of incumbent local exchange carriers ("ILECs"), including, but not limited to, local exchange service, such as plain old telephone service ("POTS"), and access services, such as digital subscriber line services and high capacity circuits." "Non-qualifying services" are defined as services that are "not qualifying service[s]." Id. Subject to the foregoing, and without waiving any objection, AT&T will construe the terms contained in this interrogatory, and all other interrogatories, in accordance with 47 C.F.R. § 51.5 and applicable law and consider all traditional local telecommunications service as a "qualifying" service and all traditional long distance service as "non-qualifying" service.

Subject to the foregoing, and consistent with AT&T's Responses to BellSouth's Interrogatories filed in other states, see Confidential Attachments 1a and 1b. These attachments provide information on two categories of switches used (and owned) by AT&T. The first category consists of "Class 5" switches. AT&T has no switches of this type in Kentucky or used to provide service in Kentucky.

The second category consists of switches used (and owned) by AT&T to provide AT&T Digital Link Service ("ADL") to enterprise using "Class 4" and "Class 5 edge" long-distance switches. ADL is not a stand-alone local product but rather one that allows large enterprise AT&T long distance customers to add local voice traffic to their dedicated facilities that handle voice

and data transmission. This permits customers to maximize efficiency by using the same trunks for local, intraLATA, long distance and international calls. Customers that subscribe to ADL service use a DS1 or higher level facility and must also employ sophisticated customer premises equipment on their premises. The switches are not capable of providing service to mass market customers because they do not have the necessary connectivity (i.e., line-side analog ports), functionality (e.g., vertical features like call waiting and call forwarding), and network interconnection, including connection to Public Safety Answering Points. AT&T does not use unbundled network elements to provide ADL service.

The ADL capable (enterprise) switches identified in Attachment 1b are identified by their toll switch CLLI codes, which end in a "T". In the LERG these same switches appear using a psuedo CLLI code ending in "DS\_" because the LERG will not accept the "T" code for a switch identified as having "end office functions" and having a "LRN".

The "Class 5 edge" long distance switches are either Lucent 5ESS or Nortel DMS switches. Both of these switch types are common in ILEC local networks. However, the switches used in the ILEC network to provide local services and the edge long distance switches in AT&T's network perform totally different functions.

Converting the edge switches to provide local services would require extensive hardware modifications, software modifications, and E911 Connectivity, as well as supporting OSS modifications and connectivity. As a practical matter, the modifications required preclude conversion of these switches.

<u>For Example</u>: The 5ESS and DMS would need to be completely rebuilt/retrofitted to support local services. Only the basic 5ESS and DMS platform (equipment racks, containers/cabinets, and some switch modules) could be reused. Modifications would include, but not limited to the following:

 OSS modifications (including loading of databases) and Connectivity to support Fault, Configuration, Account, Performance, and Security (FCAPS) Management, and other Operations, Administration, Maintenance, and Provisioning (OAM&P) processes (e.g., LIDB and ISCP).

- Software and Switch Memory Upgrades (and additional RTU Licenses) to support the Vertical Features required to provide local service.
- Line Side Peripheral Hardware Upgrades to support local services.
- E911 Connectivity and Support.
- AIN support (software and connectivity) to support IN Triggers.
- Announcement System (Hardware, Software, and Transport Facilities).
- 105 Test Line Responder Units (Hardware & Software)
- Test Buss Control Unit (TBCU) to support MLT type loop testing functions (Hardware)
- Additional Facilities and Interfaces (Hardware) required for DCS and SONET Connectivity to the Network.
- Building of ODD (Office Dependent Data) which is unique to each switch and relates to translations (lines) and parameters (equipment) which consists of information related to switch owner (line, trunk, routing, charging, equal access, BRCS) and/or the office equipment (quantity, configuration, equipage). This makes up the office database.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 2:

- 1. For each switch identified in response to Interrogatory No. 1, please:
  - (a) provide the Common Language Location Identifier ("CLLI") code of the switch;
  - (b) provide the street address, including the city and state in which the switch is located;
  - (c) identify the type of switch by manufacturer and model (e.g., Nortel DMS100);
  - (d) state the total capacity of the switch by providing the maximum number of voice-grade equivalent lines the switch is capable of serving, based on the switch's existing configuration and component parts;
  - (e) state the number of voice-grade equivalent lines the switch is currently serving based on the switch's existing configuration and component parts; and
  - (f) provide information relating to the switch as contained in Telcordia's Local Exchange Routing Guide ("LERG"); or, state if the switch is not identified in the LERG.

Response:

See response to Interrogatory No. 1, *supra*.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 3:

Identify any other switch not previously identified in Interrogatory No. 1 that Company uses to provide a qualifying service anywhere in Kentucky, irrespective of whether the switch itself is located in the State and regardless of the type of switch (e.g., circuit switch, packet switch, soft switch, host switch, remote switch). In answering this Interrogatory, do not include ILEC switches used by Company either on an unbundled or

resale basis.

Response:

AT&T incorporates by reference its response to Interrogatory No.

1 as if fully set forth.

Subject to the foregoing, none.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 4:

For each switch identified in response to Interrogatory No. 3, please:

- (g) identify the person that owns the switch;
- (h) provide the Common Language Location Identifier ("CLLI") code of the switch;
- (i) provide the street address, including the city and state in which the switch is located;
- (j) identify the type of switch by manufacturer and model (e.g., Nortel DMS100);
- (k) describe in detail the arrangement by which you are making use of the switch, including stating whether you are leasing the switch or switching capacity on the switch;
- (l) identify all documents referring or relating to the rates, terms, and conditions of Company's use of the switch; and
- (m) provide information relating to the switch as contained in Telcordia's Local Exchange Routing Guide ("LERG"); or, state if the switch is not identified in the LERG.

Response:

No switches were identified in response to Interrogatory No. 3.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 5:

Identify by name, address, and CLLI code, each ILEC wire center area, e.g., (Louisville, 526 Armory Place, LSVLKYAP), in which you provide qualifying service to any end user customers in Kentucky utilizing any of the switches identified in response to Interrogatory No. 1. If you assert that you cannot identify or do not know how to ascertain the boundaries of a wire center area, provide the requested information for the ILEC exchange in

which your end user customer is located.

Response:

AT&T incorporates by reference its response to Interrogatory

No.1 as if fully set forth.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 6:

For each ILEC wire center area identified in the foregoing Interrogatory (or ILEC exchange if you do not provide the information by wire center area) identify the total number of voice-grade equivalent lines you are providing to end user customers in that wire center area from the switches identified in

response to Interrogatory 1.

Response:

AT&T incorporates by reference its response to Interrogatory

No.1 as if fully set forth.

Provided by: Mark Argenbright

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 7:

With regard to the voice grade equivalent lines identified by ILEC wire center area (or ILEC exchange) in response to Interrogatory 6, separate the lines by end user and end user location in the following manner:

- (a) The number of end user customers to whom you provide one (1) voice-grade equivalent line;
- (b) The number of end user customers to whom you provide two (2) voice grade equivalent lines;
- (c) The number of end user customers to whom you provide three (3) voice-g grade equivalent lines;
- (d) The number of end user customers to whom you provide four (4) voice- grade equivalent lines;
- (e) The number of end user customers to whom you provide five (5) voice- grade equivalent lines;
- (f) The number of end user customers to whom you provide six (6) voice-grade equivalent lines;
- (g) The number of end user customers to whom you provide seven (7) voice-grade equivalent lines;
- (h) The number of end user customers to whom you provide eight (8) voice-grade equivalent lines;
- (i) The number of end user customers to whom you provide nine (9) voice-grade equivalent lines;
- (j) The number of end user customers to whom you provide ten (10) voice- grade equivalent lines;
- (k) The number of end user customers to whom you provide eleven (11) voice-grade equivalent lines;
- (l) The number of end user customers to whom you provide twelve (12) voice-grade equivalent lines;
- (m) The number of end user customers to whom you provide more than twelve (12) voice-grade equivalent lines.

Response:

AT&T incorporates by reference its response to Interrogatory No.1 as if fully set forth.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 8:

Identify by name, address, and CLLI code, each ILEC wire center area, e.g., (Louisville, 526 Armory Place, LSVLKYAP), in which you provide qualifying service to any end user customers in Kentucky utilizing any of the switches identified in response to Interrogatory No. 3. If you assert that you cannot identify or do not know how to ascertain the boundaries of a wire center area, provide the requested information for the ILEC exchange in

which your end user is located.

Response:

AT&T incorporates by reference its response to Interrogatory

No.1 as if fully set forth.

Subject to the foregoing, there were no switches identified in

response to Interrogatory No. 3.

Bellsouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 9:

For each ILEC wire center identified in the foregoing Interrogatory (or ILEC exchange if you do not provide the information by wire center area) identify the total number of voice-grade equivalent lines you are providing to end user customers in that wire center area from the switches identified in response to Interrogatory No. 3.

Response:

None.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 10:

With regard to the voice-grade equivalent lines identified by ILEC wire center area (or LEC exchange) in response to Interrogatory No. 9, separate the lines by end user and end user location in the following manner:

- (a) The number of end user customers to whom you provide one (1) voice-grade equivalent lines;
- (b) The number of end user customers to whom you provide two (2) voice-grade equivalent line;
- (c) The number of end user customers to whom you provide three (3) voice- grade equivalent lines;
- (d) The number of end user customers to whom you provide four (4) voice- grade equivalent lines;
- (e) The number of end user customers to whom you provide five (5) voice- grade equivalent lines;
- (f) The number of end user customers to whom you provide six (6) voice-grade equivalent lines;
- (g) The number of end user customers to whom you provide seven (7) voice-grade equivalent lines;
- (h) The number of end user customers to whom you provide eight (8) voice-grade equivalent lines;
- (i) The number of end user customers to whom you provide nine (9) voice-grade equivalent lines;
- (j) The number of end user customers to whom you provide ten (10) voice- grade equivalent lines;
- (k) The number of end user customers to whom you provide eleven (11) voice- grade equivalent lines;
- (l) The number of end user customers to whom you provide twelve (12) voice- grade equivalent lines;
- (m) The number of end user customers to whom you provide more than twelve (12) voice-grade equivalent lines;

Response:

None.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 11:

Identify by name, address, and CLLI code each ILEC wire center area, i.e., the territory served by the wire center, in which you provide qualifying service to any end user customers in Kentucky using an ILEC's switch either on an unbundled or resale basis. If you assert that you cannot identify or do not know how to ascertain the boundaries for a wire center area, provide the requested information for the ILEC exchange in which your end

user customer is located.

Response:

AT&T incorporates by reference its response to Interrogatory

No.1 as if fully set forth.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 12:

For each ILEC wire center area identified in the foregoing Interrogatory (or ILEC exchange if you do not provide the information by wire center area) identify the total number of voice-grade equivalent lines you are providing to end user customers in that wire center using an ILEC's switch either on an unbundled or resale basis.

Response:

AT&T incorporates by reference its response to Interrogatory No.1 as if fully set forth.

Subject to the foregoing, AT&T Consumer Services began offering services via UNE-P to residential and small business customers on November 4, 2003. No data responsive to this request will be available prior to January 15, 2003. AT&T will supplement its response to this request.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 13:

With regard to the voice-grade equivalent lines identified by ILEC wire center area (or ILEC exchange) in response to Interrogatory No. 12, separate the lines by end user location in the following manner:

- (a) The number of end user customers to whom you provide one (1) voice-grade equivalent line;
- (b) The number of end user customers to whom you provide two (2) voice-grade equivalent line;
- (c) The number of end user customers to whom you provide three (3) voice- grade equivalent lines;
- (d) The number of end user customers to whom you provide four (4) voice- grade equivalent lines;
- (e) The number of end user customers to whom you provide five (5) voice- grade equivalent lines;
- (f) The number of end user customers to whom you provide six (6) voice-grade equivalent lines;
- (g) The number of end user customers to whom you provide seven (7) voice-grade equivalent lines;
- (h) The number of end user customers to whom you provide eight (8) voice-grade equivalent lines;
- (i) The number of end user customers to whom you provide nine (9) voice-grade equivalent lines;
- (j) The number of end user customers to whom you provide ten (10) voice- grade equivalent lines;
- (k) The number of end user customers to whom you provide eleven (11) voice-grade equivalent lines;
- (l) The number of end user customers to whom you provide twelve (12) voice-grade equivalent lines;
- (m) The number of end user customers to whom you provide more than twelve (12) voice-grade equivalent lines;

Response:

AT&T incorporates by reference its response to Interrogatory No.1 as if fully set forth.

AT&T Consumer Local UNE-P no data available. See response to Interrogatory No. 12.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 14:

Do you offer to provide or do you provide switching capacity to another local exchange carrier for its use in providing qualifying service anywhere in the nine states of the BellSouth region? If the answer to this Interrogatory is in the affirmative, for each switch that you use or provide such switching capacity, please:

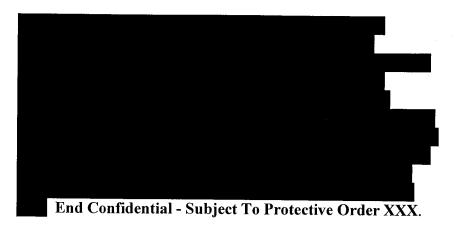
- (a) Provide the Common Language Location identifier ("CLLI") code of the switch;
- (b) Provide the street address, including the city and state in which the switch is located;
- (c) Identify the type of switch by manufacturer and model (e.g., Nortel DMS 100.)
- (d) State the total capacity of the switch by providing the maximum number of voice-grade equivalent lines the switch is capable of serving, based on the switch's existing configuration and component parts;
- (e) State the number of voice-grade equivalent lines the switch is currently serving, based on the switch's existing configuration and component parts; and
- (f) Identify all documents referring to or relating to the rates, terms and conditions of AT&T's provision of switching capability.

Response:

Specifically with respect to subpart (f), AT&T objects on the basis that this Interrogatory is not reasonably calculated to lead to the discovery of admissible evidence. Documents referring to the terms of AT&T's provisioning of switching for Comcast are not relevant given the prior explanation.

AT&T incorporates by reference its response to Interrogatory No. 1, as if fully set forth. Subject to the foregoing, and without waiving any objection, AT&T does not offer wholesale unbundled switching to other carriers. XXX Begin Confidential

- Subject to Protective Order



BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 15:

Identify every business case in your possession, custody or control that evaluates, analyzes or otherwise refers or relates to the offering of a qualifying service using:

(1) the Unbundled Network Element Platform (UNE-P), (2) self-provisioning switching, (3) switching obtained from a third party provider other than an ILEC, or (4) any combination of these items.

Objection:

AT&T objects to this interrogatory to the extent that it is not reasonably calculated to lead to the discovery of admissible evidence.

Pursuant to the Triennial Review Order, rules of Kentucky Public Service Commission, and Kentucky Civil Practice Statutes, to the extent that this interrogatory requests specific financial, business or proprietary information regarding AT&T's economic business model, AT&T objects to providing or producing any such information on the grounds that those requests presume that the market entry analysis is contingent upon AT&T's economic business model instead of the hypothetical business model contemplated by the Triennial Review Order. The Triennial Review Order explicitly contemplates that in considering whether a competing carrier economically can compete in a given market without access to a particular unbundled network element, the Commission must consider the likely revenues and costs associated with the given market based on the most efficient business model for entry rather than to a particular carrier's business model. TRO at ¶ 326. In particular, the FCC stated:

In considering whether a competing carrier could economically serve the market without access to the incumbent's switch, the state commission must also consider the likely revenues and costs associated with local exchange mass market service . . . The analysis must be based on the *most efficient business model* for entry rather than to any *particular carrier's business model*.

<u>Id.</u> [emphasis added] Additionally, with respect to economic entry, in  $\P$  517, the FCC stated that ". . . [t]he analysis must be

based on the most efficient business model for entry rather than to any particular carrier's business model." Furthermore, in Footnote 1579 of Paragraph 517, the FCC clarified that "... [s]tate commissions should not focus on whether competitors operate under a cost disadvantage. State commissions should determine if entry is economic by conducting a business case analysis for an *efficient entry*." [emphasis added]

In addition to these statements, the FCC also made numerous other references to the operations and business plans of an efficient competitor, specifically rejecting a review of a particular carrier's business plans or related financial information. See, \$\\\\$84, Footnote 275 ("Once the UNE market is properly defined, impairment should be tested by asking whether a reasonable efficient CLEC retains the ability to compete even without access to the UNE.") (citing BellSouth Reply, Attachment 2, Declaration of Howard A. Shelanski at \$\\\\$2 (emphasis added)). See also, TRO at \$\\\\$115; \$\\\\$469; \$\\\\$485, Footnote 1509; \$\\\\$517, Footnote 1579; \$\\\\$519, Footnote 1585; \$\\\\$520, Footnotes 1588 and 1589; \$\\\\$581, and Footnote 1788.\]

Accordingly, the FCC's TRO specifically contemplates the consideration of financial and related information of an *efficient* "model" competitor and not that of AT&T or any other particular competitor. As a result, discovery of AT&T's financial information or business plans will not lead to the discovery of admissible evidence in this proceeding.

<sup>&</sup>lt;sup>1</sup> For the Commission's convenience, please see Attachment 1 that sets forth the text of these relevant Paragraphs and Footnotes from the *TRO*. Complete text of the Triennial Review Order is available @www.fcc.gov.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 16:

Identify any documents that you have provided to any of your employees or agents, or to any financial analyst, bank or other financial institution, shareholder or any other person that describes, presents, evaluates or otherwise discusses in whole or part, how you intend to offer or provide local exchange service, including but not limited to such things as the markets in which you either do participate or intend to participate, the costs of providing such service, the market share you anticipate obtaining in each market, the time horizon over which you anticipate obtaining such market share, and the average revenues you expect

per customer.

Objection:

AT&T incorporates its objection to Interrogatory No.15 as if fully set forth.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 17:

If not identified in response to a prior Interrogatory, identify every document in your possession, custody, or control referring or relating to the financial viability of self-provisioning switching in your providing qualifying services to end user customers.

Objection

AT&T incorporates by reference its objections to Interrogatory15

as if fully set forth.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 18:

Do you have switches that are technically capable of providing, but are not presently being used to provide, a qualifying service in Kentucky? If the answer to this interrogatory is in the affirmative, please:

- (a) Provide the Common Language Location Identifier ("CLLI") code of the switch;
- (b) Provide the street address, including the city and state in which the switch is located;
- (c) Identify the type of switch by manufacturer and model (e.g., Nortel DMS100);
- (d) State the total capacity of the switch by providing the maximum number of voice-grade equivalent lines the switch is capable of serving, based on the switch's existing configuration and component parts;
- (e) State the number of voice-grade equivalent lines the switch is currently serving, based on the switch's existing configuration and component parts; and
- (f) Identify any documents in your possession, custody or control that discuss, evaluate, analyze or otherwise refer or relate to whether those switches could be used to provide a qualifying service in Kentucky.

Response:

No.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 19:

Identify each MSA in Kentucky where you are currently offering a qualifying service without regard to whether you are offering the service using your own facilities, UNE-P, resale or in some other fashion.

Response:

AT&T incorporates its response to Interrogatory No. 1 as if fully set forth herein. Subject to the foregoing, AT&T's tariff for local service is statewide. AT&T offers a qualifying service via UNE-P to residential and small business customers in areas designated as UNE Zones 1 and 2 as set forth by Order of the Kentucky Public Service Commission. Information on areas of availability is not available by MSAs.

•

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 20:

If you are offering a qualifying service outside of the MSAs identified in response to Interrogatory 19, identify those geographic areas either by describing those areas in words or by providing maps depicting those areas in which you offer such service, without regard to whether you are offering the service

using your own facilities, UNE-P, or resale.

Response:

See response to Interrogatory No. 19.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 21:

Describe with particularity the qualifying services that you offer in the geographic areas described in response to Interrogatories 19 and 20, including the rates, terms, and conditions under which such services are offered. If the qualifying services you offer in those areas vary by area, provide a separate statement of services offered and the rates, terms, and conditions for such services in each area. If this information is contained on a publicly available web site that clearly identifies the geographic areas and identifies the relevant rates, terms and conditions for such areas, it will be a sufficient answer to identify the web site. It will not be a sufficient response if the web site requires the provision of a telephone number or series of telephone numbers in order to identify the geographic area in which you provide such service, or the rates, terms, and conditions upon which such service is provided.

Response:

AT&T incorporates it's response to Interrogatory No. 1. Subject to the foregoing, qualifying services offered by AT&T "including the rates, terms, and conditions under which services are offered" can be found in AT&T's publicly available tariffs on file with the Kentucky Public Service Commission. Additionally, information regarding these services are available at

http://serviceguide.att.com/servicelibrary/business/ext/state tariff buss.cfm. While the website does prompt the input of a telephone number, AT&T has stated in response to previous Interrogatory responses the geographic areas where these services are available.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 22:

Identify each MSA in Kentucky where you are currently offering a non-qualifying service without regard to whether you are offering the service using your own facilities, UNE-P, or resale,

or in some other fashion.

Response:

AT&T incorporates its responses to Interrogatory No. 1. Subject to the foregoing, AT&T offers long distance services statewide in

the state of Kentucky.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 23:

If you offer a non-qualifying service outside of the MSAs identified in response to Interrogatory 22, identify those geographic areas ether by describing those areas in words or by providing maps depicting the geographic areas in which you offer such service, without regard to whether you are offering the service using your own facilities, UNE-P, resale or in some other

fashion.

Response:

See response to No. 22.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 24:

Describe with particularity the non-qualifying services that you offer in the geographic areas described in response to Interrogatories 22 and 23, including the rates, terms, and conditions under which such services are offered. If the non-qualifying services you offer in those areas vary by area, provide a separate statement of services offered and the rates, terms, and conditions for such services in each area. If this information is contained on a publicly available web site that clearly identifies the geographic areas and identifies the relevant rates, terms and conditions for such areas, it will be a sufficient answer to identify the web site. It will not be a sufficient response if the web site requires the provision of a telephone number or series of telephone numbers in order to identify the geographic area in which you provide such service, or the rates, terms, and conditions upon which such service is provided.

Response:

AT&T incorporates its responses to Interrogatory No. 1, as if fully set forth herein. Given the vague and indefinite definition of non-qualifying services, AT&T cannot provide a description of all of the non-qualifying services it offers. AT&T provides long distance services statewide. A description of those services is publicly available at AT&T's website. <a href="http://ccpkms.ims.att.com/tariffs/index.html">http://ccpkms.ims.att.com/tariffs/index.html</a>. Follow appropriate link for Intra-State and Inter-State Tariffs.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 25:

Please state the total number of end user customers in the State of

Kentucky to whom you only provide qualifying service.

Response:

AT&T incorporates its responses to Interrogatory No. 1. Subject to the foregoing: The total number of end user customer's in Kentucky to whom AT&T provides qualifying service (local only) for AT&T Consumer Local is not available at this time. Please see response to Interrogatory No. 12. AT&T will supplement its response to this Interrogatory as this information

becomes available.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 26:

For those end user customers to whom you provide qualifying service in the state of Kentucky, please state the average monthly revenues you receive from each end-user customer.

Response:

AT&T incorporates its objection to Interrogatory No. 15, supra.

Data responsive to this request is not available for 90 to 120 days from date AT&T began offering service. Please see response to

Interrogatory Nos. 12 and 25.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 27:

For those end user customers to whom you only provide qualifying service in the State of Kentucky, please state the average number of lines that you provide each such end user

customer.

Response:

AT&T incorporates by reference its response to Interrogatory No.

1 as if fully set forth.

Data responsive to this request is not currently available. Please

see response to Interrogatory No. 12.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 28:

Please state the total number of end user customers in the State of Kentucky to whom you provide only non-qualifying service.

Response:

By agreement o the parties, no response to this Interrogatory is

required.

Provided by: Jay Bradbury

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 29:

For those end user customers to whom you only provide nonqualifying service in the State of Kentucky, please state the average monthly revenues you receive from each such customer.

Objection:

By agreement of the parties, no response to this Interrogatory is

required.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 30:

Please state the total number of end user customers in the State of

Kentucky to whom you provide both qualifying and non-

qualifying service;

Response:

AT&T incorporates by reference its response to Interrogatory

No.1 as if fully set forth.

For AT&T Consumer Services (UNE-P customers), this information is not currently available. Please see response to

Interrogatory No. 12.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 31:

For those end user customers to whom you provide qualifying and non-qualifying service in the State of Kentucky, please state the average monthly revenues you receive from each such end

user customer

Objection:

AT&T incorporates its responses to Interrogatory Nos. 1 and 15,

supra.

Information responsive to this request is not currently available.

Please see response to Interrogatory No. 12.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 32:

For those end user customers to whom you provide qualifying and non-qualifying service in the State of Kentucky, please state the average number of lines that you provide each customer.

Response:

AT&T incorporates by reference its response to Interrogatory

No.1 as if fully set forth.

See response to Interrogatory No. 31.

BellSouth First Set of Interrogatories

DATED:

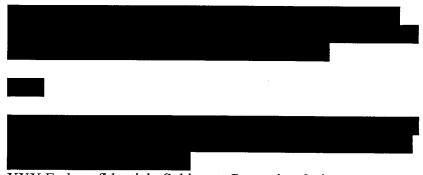
October 10, 2003

Interrogatory 33:

Please provide a breakdown of the total number of end user customers served by AT&T in Kentucky by class or type of end user customers (e.g., residential customers, small business customers, mass market customers, enterprise customers, or whatever type of classification that you use to classify your customers. For each such classification, and/or if you provide another type of classification, define and describe with specificity that classification so that it can be determined what kinds of customers you have in each classification.)

Response:

XXX Begin Confidential -Subject to Protective Order



XXX End confidential -Subject to Protective Order

AT&T Consumer Local:

This product line serves both residential and small business customers via UNE-P. No data is available responsive to this request. Please see response to Interrogatory No. 12

Provided by: Mark Argenbright

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 34:

For each class or type of end user customer referenced in Interrogatory No. 33, please state the average acquisition cost for each such end user class or type. Please provide this information

for each month from January 2000 to the present.

Response:

AT&T incorporates its responses to Interrogatory #15, supra.

Subject to the foregoing, average acquisition cost for all AT&T end user customer classes is \$125.00. See Attachment 34.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 35:

For each class or type of end user customer referenced in Interrogatory No. 33, please state the typical churn rate for each such end user class or type. Please provide this information fore each month from January 2000 to the present.

Response:

AT&T incorporates its responses to Interrogatory No 15, supra.

Subject to the foregoing, churn rate is 4.6%. See Attachment 34.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 36:

For each class or type of end user customer referenced in Interrogatory No. 33, please state the share of the local exchange market that you have obtained. Please provide this information from January 2000 to the present.

Response:

AT&T, like BellSouth, relies on industry publications assessing "market shares." Upon information and belief, BellSouth has possession, custody, or control of those same industry

publications.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 37:

Identify any documents in your possession, custody or control that evaluate, discuss or otherwise refer or relate to your cumulative market share of the local exchange market in

Kentucky.

Response:

AT&T, like BellSouth, relies on industry publications assessing "market shares." Upon information and belief, BellSouth has possession, custody, or control of those same industry

publications.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 38:

Identify any documents in your possession, custody or control that evaluate or otherwise refer or relate to any projections that you have made regarding your cumulative market share growth in the local exchange market in Kentucky.

Objection:

AT&T incorporates its objection to Interrogatory No. 15, supra.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 39:

Describe how the marketing organization that is responsible for marketing qualifying service in Kentucky is organized, including the organization's structure, size in terms of full-time or equivalent employees, including contract and temporary employees, and the physical work locations for such employees. In answering this Interrogatory, please state whether you utilize authorized sales representatives in your marketing effort in Kentucky, and, if so, describe with particularity the nature, extent, and rates, terms, and conditions of such use.

Response:

AT&T incorporates its objection to Interrogatory No. 15, supra.

Subject to the foregoing, and without waiving any objection, AT&T uses a variety of marketing methods including, but not limited to: direct telemarketing sales, direct marketing (i.e., "feet on the street") and direct mail. These functions are primarily provided through contracts with independent firms using material developed by AT&T Business Services and Consumer Services Product Teams.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 40:

How do you determine whether you will serve an individual customer's location with multiple DS0s or whether you are going to use a DS1 or larger transmission system? Provide a detailed description of the analysis you would undertake to resolve this issue, and identify the factors you would consider in making this

type of decision.

Response:

AT&T uses a variety of factors to determine the type of facilities it uses to serve a particular customer location. First, because of the operational and economic impairments relating to the use of UNE-L, AT&T primarily uses UNE-P to serve small business customers requiring multiple DSO analog lines. Other criteria AT&T uses to determine the use of a DS1 facility include: (a) the costs of acquiring and providing the DS1-loop (including all NRCs) as compared to the costs of DS0 facilities; (2) the cost of providing digitization equipment (channel bank), and back up power at the customer location, including purchase price, installation and maintenance of the equipment; (3) the ability of AT&T to recover the equipment and other costs over the term of the customer's service.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 41:

Is there a typical or average number of DSOs at which you would choose to serve a particular customer with a DS1 or larger transmission system? All other things being equal? If so, please describe that typical or average number and explain how that number was derived.

Response:

The determination to use a DS1 facility is based on a case-by case analysis of the factors described in response to Interrogatory 40 above, and differs based on the underlying cost of facilities purchased from the ILEC and geographic differences in labor or other expenses.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 42:

What additional equipment, if any, would be required (on the customer's side of the demarcation point rather than on the network side pf the demarcation point) to provide service to a customer with a DS1 rather than multiple DS0s? For instance, if a customer had 10 DSOs and you want to provide the customer with the same functionality using a DS1, would a D-4 channel bank, or a digital PBX be required in order to provide equivalent service to the end user that has 10 DS0s? If so, please provide the average cost of the equipment that would be required to provide that functional equivalency (that is, the channel bank, or the PBX or whatever would typically be required should you decide to serve the customer with a DS1 rather than multiple DS0s.)

Response:

In order to utilize a DS1 facility to provision service to a customer utilizing CPE that is not compatible with digital service, AT&T must install additional equipment including a D4 channel bank (or its equivalent), a Data Service Unit/Channel Service Unit (DSU/CSU), and, if necessary to ensure continuous service, battery back up. To the extent the equipment does not include trouble sectionalization functionality, a smart jack/NID may also be required. AT&T will supplement its response to this Interrogatory with information regarding average cost of equipment.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

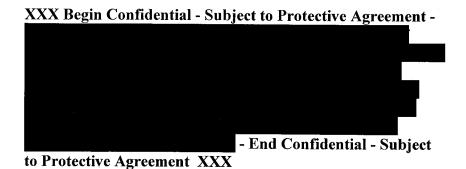
Interrogatory 43:

What cost of capital do you use in evaluating whether to offer a qualifying service in a particular geographic market and how is that cost of capital determined?

Response:

AT&T incorporates its objections to Interrogatory No 15, *supra* and notes that the FCC's TRO specifically contemplates the consideration of financial and related information of an efficient "model" competitor and not that of AT&T or any other *particular competitor*.

Subject to the foregoing, and without waiving any objections, AT&T states the following:



BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 44:

With regard to the cost of capital you use in evaluating whether to provide a qualifying service in a particular geographic market, what are the individual components of that cost of capital, such as the debt-equity ratio, the cost of debt and the cost of equity?

Response:

AT&T incorporates its objections to Interrogatory No15, *supra* and notes that the FCC's *TRO* specifically contemplates the consideration of financial and related information of an *efficient* "model" competitor and not that of AT&T or any other particular competitor.

Subject to the foregoing, and without waiving any objections, AT&T states:

XXX Begin Confidential - Subject to Protective Agreement -

End Confidential - Subject to

**Protective Agreement XXX** 

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 45:

In determining whether to offer a qualifying service in a particular geographic market, what time period do you typically use to evaluate that offer? That is, do you use one year, five years, ten years, or some other time horizon over which to evaluate the project?

Response:

AT&T incorporates its objections to Interrogatory No. 15, *supra* and notes that the FCC's TRO specifically contemplates the consideration of financial and related information of an efficient "model" competitor and not that of AT&T or any other particular competitor.

Accordingly, AT&T's determination of whether to offer a "qualifying service in a particular geographic market" and the time periods involved in such evaluation are irrelevant and not reasonably calculated to lead to the discovery of admissible evidence.

Subject to the foregoing, AT&T the period of time used is 3 to 5 years.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 46:

Provide your definition of sales expense as that term is used in

your business.

Response:

See Attachment No. 46.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 47:

Based on the definition of sales expense in the foregoing Interrogatory, please state how you estimate sales expense when evaluating whether to offer a qualifying service in a particular geographic market?

Response:

AT&T incorporates its objections to Interrogatory No. 15, supra.

Subject to the foregoing:

Sales Expenses are included with overall SG&A Expenses (Sales General and Administrative) and are expressed as a percentage

of overall customer revenues.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 48:

Provide your definition of general and administrative (G&A)

costs as you use those terms in your business.

Response:

See Attachment No. 48.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 49:

Based on the definitions of G&A costs in the foregoing

Interrogatory, please state how you estimate G&A expenses when evaluating whether to offer a qualifying service in a particular

geographic market.

Response:

Estimated SG&A expenses are 25% of local revenues. See

Attachment 34.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 50:

For each day since January 1, 2000, identify the number of individual hot cuts that BellSouth has performed for AT&T in

each state in BellSouth's region.

Response:

Upon information and belief, BellSouth is in possession of documents and other information requested in Interrogatory Nos. 50 and 51. Assuming BellSouth will provide such information and documentation to AT&T, AT&T will confirm or deny the information contained in BellSouth's records.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 51:

For each individual hot cut identified in response to Interrogatory No. 50, state:

- i. Whether the hot cut was coordinated or not;
- ii. If coordinated, whether the hot cut occurred as scheduled;
- iii. If the hot cut did not occur as scheduled, state whether this was due to a problem with BellSouth, AT&T, the end-user customer, or some third party, and describe with specificity the reason the hot cut did not occur as scheduled;
- iv. If there was a problem with the hot cut, state whether AT&T complained in writing to BellSouth or anyone else.

Response:

Upon information and belief, BellSouth is in possession of documents and other information requested in Interrogatory Nos. 50 and 51. Assuming BellSouth will provide such information and documentation to AT&T, AT&T will confirm or deny the information contained in BellSouth's records.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 52:

Does Company have a preferred process for performing batch hot cuts? If the answer to this Interrogatory is in the affirmative, please describe this process with particularity and identify all documents that discuss, describe ort otherwise refer or relate to this preferred process.

Response:

Discovery in this case is continuing in nature and any response to this interrogatory is premature. AT&T is in the process of formulating the case it will present before the Commission and has not formulated a response to this interrogatory at this early stage in the proceeding.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 53:

Does Company have a preferred process for performing individual hot cuts? If the answer to this interrogatory is in the affirmative, please describe this process with particularity and identify all documents that discuss, describe, or otherwise refer or relate to this preferred process.

Response:

AT&T's preferred process allows the provisioning of loops used for local service to be operationally and competitively neutral, making it the local service counterpart of "equal access" in the long-distance market. This is a process that AT&T has generically referred to as "electronic loop provisioning" ("ELP"). In this environment, consumers would be able to change their local carrier seamlessly, and no carrier would have an inordinate advantage in competing for a mass market customer's business. Implementation of such an electronic provisioning process would create permanent virtual circuits that could use software commands to shift loops from one carrier to another quickly and inexpensively, with no loss or degradation of service.

See also Attachment No. 53.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 54:

If Company has a preferred process for individual hot cuts that differs from BellSouth's process, identify each specific step in Company's process that differs from BellSouth's process.

Response:

See response to Interrogatory No. 53, supra.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 55:

If Company has a preferred process for bulk hot cuts that differs

from BellSouth's process, identify each specific step in Company's process that differs from BellSouth's process.

Response:

In responding to this Interrogatory, AT&T assumes that

BellSouth is referring to the batch hot cut process as defined in BellSouth's First Set of Interrogatories to AT&T. Accordingly,

see response to Interrogatory No. 52.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 56:

Does Company have any estimates of what a typical individual hot cut should cost? If the answer to this Interrogatory is in the affirmative, please provide that estimate, describe with particularity how that estimate was calculated, and identify all

documents referring or relating to such estimates.

Response:

See response to Interrogatory No. 53, *supra* for AT&T's preferred individual migration process. AT&T does not have a specific rate at this time, but as a fully electronic solution, it should be no more expensive than a UNE-P or PIC change.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 57:

Does Company have any estimates of what a typical bulk hot cut should cost? If the answer to this Interrogatory is in the affirmative, please provide that estimate, describe with particularity how that estimate was calculated, and identify all documents referring or relating to such estimates.

Response:

In responding to this Interrogatory, AT&T assumes that BellSouth is referring to a batch hot cut process as defined in BellSouth's First Set of Interrogatories to AT&T. That being the case, AT&T does not have a specific batch rate at this time. However, guidance provided by the FCC suggests that it should be 1) based on TELRIC, TRO at ¶489, low cost, Id. at ¶489, lower than current rates, Id. at ¶487, and comparable to UNE-P, Id. at ¶512, Footnote 1574. See also response to Interrogatory No. 79, *infra*.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 58:

What is the largest number of individual hot cuts that Company has requested in any individual central office in each of the nine BellSouth states on a single day? In answering this Interrogatory, identify the central office for which the request was made, and the number of hot cuts that were requested. State with specificity what the outcome was for each of the hot cuts in each of the central offices so described, if not provided in response to an

earlier interrogatory.

Response:

The requested information is in the possession, custody and control of BellSouth. Assuming BellSouth will provide such information and documentation to AT&T, AT&T will confirm or deny the information contained in BellSouth's records.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 59:

Does any ILEC in the BellSouth region have a batch hot cut process that is acceptable to Company or that Company believes is superior to BellSouth's batch hot cut process? If so, identify the ILEC and describe with particularity the ILEC's batch hot cut process, specifying any differences between the ILEC's batch hot

cut process and BellSouth's.

Response:

See AT&T's response to Interrogatory No. 63, infra.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 60:

Does any ILEC in the BellSouth region have a cost for a batch hot cut process that is acceptable to Company? If so, name the

ILEC and provide the rate and the source of the rate.

Response:

AT&T incorporates its response to Interrogatory No.52 as if fully

set forth.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 61:

Does any ILEC in the BellSouth Region have an individual hot cut process that is acceptable to Company or that Company believes is superior to BellSouth's individual hot cut process? If so, identify the ILEC and describe with particularity the ILEC's individual hot cut process, specifying any differences between the

ILEC's individual hot cut process and BellSouth's.

Response:

No ILEC in the BellSouth Region has an individual hot cut

process that is acceptable to AT&T.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 62:

Does any ILEC in the BellSouth region have a rate for an

individual hot cut process that is acceptable to Company? If so, name the ILEC and provide the rate and the source of the rate.

Response:

No ILEC has an acceptable rate for an individual hot cut process

in BellSouth's region.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 63:

Does any ILEC outside the BellSouth region have a batch hot cut process that is acceptable to Company or that Company believes is superior to BellSouth's batch hot cut process? If so, identify the ILEC and describe with particularity the ILEC's batch hot cut process, specifying any differences between the ILEC's batch hot cut process and BellSouth's.

Response:

ILECs have just begun to provide components or outlines of proposed batch processes in workshops throughout the country; therefore, AT&T does not have sufficient information to respond at this time. However, previous project or bulk processes did have components that were superior to BellSouth's process. For example, Verizon-NY and SBC have "bulk" provisioning processes and allow time specific migrations. Further, Verizon has in place an electronic communications system which offers some advantages over manual phone calls or faxes.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 64:

Does any ILEC outside the BellSouth region have a rate for a batch hot cut process that is acceptable to Company? If so, name the ILEC and provide the rate and the source of the rate.

Response:

AT&T incorporates its response to Interrogatory Nos. 52 and 64

as if fully set forth.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 65:

Does any ILEC outside the BellSouth region have an individual hot cut process that is acceptable to Company or that Company AT&T believes is superior to BellSouth's individual hot cut process? If so, identify the ILEC and describe with particularity the ILEC's individual hot cut process, specifying any differences between the ILEC's individual hot cut process and BellSouth's.

Response:

Discovery in this case is continuing in nature and any response to this interrogatory is premature. AT&T is in the process of formulating the case it will present before the Commission and has not formulated a response to this interrogatory at this early stage in the proceeding.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 66:

Does any ILEC outside the BellSouth region have a rate for an individual hot cut process that is acceptable to Company? If so, name the ILEC and provide the rate and the source of the rate.

Response:

Discovery in this case is continuing in nature and any response to this interrogatory is premature. AT&T is in the process of formulating the case it will present before the Commission and has not formulated a response to this interrogatory at this early

stage in the proceeding.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 67:

Does Company order coordinated or non-coordinated hot cuts?

Response:

AT&T has ordered both coordinated and non-coordinated cuts.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 68:

Does Company use the CFA database?

Response:

Yes.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 69:

Identify every issue related to BellSouth's hot cut process raised

by Company since October 2001.

Response:

Due to the high costs and operational issues of hot cuts (see Attachment 69), AT&T has purchased minimal numbers of hot cuts since that period of time. For example, based on BellSouth's PMAP reports, BellSouth completed 298 (regionally) hot cut LSRs in October 2001, but only 18 in October 2002. Based in part on the above complications, AT&T has focused on other modes of market entry. Therefore, AT&T has not used this forum for hot cut issues, but has primarily focused instead on issues that are most relevant to modes of entry used by AT&T.

See Attachment 69A for issues raised by AT&T in the Florida collaborative. It should also be noted that other CLECs raised issues that were of interest to AT&T, making it unnecessary for

AT&T to engage in any duplicative efforts.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 70:

What is the appropriate volume of loops that you contend the Kentucky Public Service Commission should use in establishing a batch hot cut process consistent with FCC Rule

51.319(d)(2)(ii)? In answering this Interrogatory, please state all facts and identify all documents supporting this contention.

Response:

AT&T incorporates its response to Interrogatory No. 52 as if fully set forth.

In addition, AT&T is currently without sufficient information to answer this interrogatory with an exact volume or number. Furthermore, AT&T refers BellSouth to ¶489 of the TRO and asserts that the appropriate volume of loops must meet the operational and economic models as defined by the FCC and the TRO. In other words, the requisite volume of loops to meet the TRO and the FCC Rule cited above is that amount required to support demand created by the additional volume of customers added as a result of the implementation of the FCC's TRO, and to ensure unconstrained future growth of competition post TRO implementation.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 71:

What is the appropriate process that you contend the Kentucky Public Service Commission should use in establishing a batch hot cut process consistent with FCC Rule 51.319(d)(2)(ii)? In answering this Interrogatory, please state all facts and identify all

documents supporting this contention.

Response:

AT&T incorporates its response to Interrogatory No. 52 as if

fully set forth.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 72:

If Company disagrees with BellSouth's individual hot cut process, identify every step that Company contends is

unnecessary and state with specificity why the step is

unnecessary.

Response:

See response to Interrogatory No. 53, supra.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 73:

If Company disagrees with BellSouth's bulk hot cut process, identify every step that Company contends is unnecessary and state with specificity why the step is unnecessary.

Response:

AT&T disagrees with, at a minimum, the following aspects of BellSouth's process, even as an interim batch process to be used in narrow, tailored circumstances.:

- a. It does not appear to be a batch provisioning process, i.e. all the orders are not provisioned at the same time, or even on the same day.
- b. It does not permit time specific cuts.
- c. It does not allow coordinated cuts if a change of facilities is required.
- d. It does not allow after-business-hours cuts, which are necessary to meet customers need to have uninterrupted telephone phone service during business hours.
- e. There is no assurance that services requested by the CLEC to be migrated on the same "batch" order will in fact be worked on the same day, undermining significantly the ability of the CLEC to impact the quality and timing of the cut-over. Indeed, BellSouth appears to provision its batch orders no differently than its individual orders.
- f. There is no assurance that all of an individual customer's lines will be cut on the same day, creating further customer satisfaction issues. For example, BellSouth could create groups of lines to migrate that included some of one customer's lines and some of another customer's lines but not all of either customer's lines.
- g. BellSouth is unwilling to commit to the number of lines or customers it will provision per day.
- h. BellSouth's process does not provide for any additional

safeguards, such as real-time communication between the two companies during the conversion process, or a process for timely service restoration in the event of a problem.

i. There are no cost savings to the CLEC from using this process.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 74:

Identify by date, author and recipient every written complaint Company has made to BellSouth regarding BellSouth's hot cut

process since October 2001.

Response:

See Attachment No. 74. See also response to Interrogatory No.

69.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 75:

How many unbundled loops does Company contend BellSouth must provision per state per month to constitute sufficient volume

to assess BellSouth's hot cut process?

Response:

See response to Interrogatory No. 70, supra.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 76:

What is the appropriate information that you contend the Kentucky Public Service Commission should consider in evaluating whether the ILEC is capable of migrating multiple lines served using unbundled local circuit switching to switches operated by a carrier other than the ILEC in a timely manner in establishing a batch hot cut process consistent with FCC Rule 51.310(d)(2)(ii)? In answering this Interrogatory, please state all facts and identify all documents supporting this contention.

Response:

The FCC's TRO ¶512 and Footnote 1574 outlines the overall or high level criteria that the Kentucky Public Service Commission should consider when evaluating the question posed in

Interrogatory No. 76.

In addition to the above, discovery in this case is continuing in nature and the response to this interrogatory may evolve as AT&T formulates the case it will present before the Commission

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 77:

What is the average completion interval metric for provision of high volumes of loops that you contend the Kentucky Public Service Commission should require in establishing a batch hot cut process consistent with FCC Rule 51.319(d)(2)(ii)? In answering this Interrogatory, please state all facts and identify all documents supporting this contention.

Response:

The FCC's TRO ¶512 and Footnote 1574 outlines the overall or high level criteria that the Kentucky Public Service Commission should consider when evaluating the question posed in Interrogatory #78. According to the FCC's Rules and the TRO, the average completion interval metric for provision of high volumes of loops must be, at a minimum, equal to the order completion interval for UNE-P. See, TRO ¶512, Footnote 1574.

In addition to the above, discovery in this case is continuing in nature and the response to this interrogatory may evolve as AT&T formulates the case it will present before the Commission.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 78:

What are the rates that you contend the Kentucky Public Service Commission should adopt inn establishing a batch hot cut process consistent with FCC Rule 51.319(d)(2)(ii)? In answering this Interrogatory, please state all facts and identify all documents supporting this contention.

Response:

As indicated in the FCC Rule referenced above, rates must be set in accordance with the FCC UNE Pricing Rules. Furthermore, pursuant to ¶470 of the TRO, rates must be sufficiently low to overcome "impairment" and to allow CLECs to overcome the economic barriers associated with the hot cut process. See also response to Interrogatory No. 58, *supra*.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 79:

What are the appropriate product market(s) that you contend the

Kentucky Public Service Commission should use in

implementing FCC Rule 51.319(d)(2)(i)? In answering this Interrogatory, please state all facts and identify all documents

supporting this contention.

Response:

Discovery in this case is continuing in nature and any response to

this interrogatory is premature. AT&T is in the process of formulating the case it will present before the Commission and has not formulated a response to this interrogatory at this early

stage in the proceeding.

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 80:

What are the appropriate geographic market(s) that you contend

the Kentucky Public Service Commission should use in implementing FCC Rule 51.319(d)(2)(i)? In answering this Interrogatory, please state all facts and identify all documents

supporting this contention.

Response:

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 81:

Do you contend that there are operational barriers within the meaning of FCC Rule 51.319(d)(2)(iii)(B)(2) that would support a finding that requesting telecommunications carriers are impaired without access to local circuit switching on an unbundled basis in a particular market? If the answer to this Interrogatory is in the affirmative, describe with particularity each

such operational barrier, and state all facts and identify all

documents supporting your contention.

Response:

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 82:

Do you contend that there are economic barriers within the meaning of FCC Rule 51.319(d)(2)(iii)(B)(3) that would support a finding that requesting telecommunications carriers are impaired without access to local circuit switching on an unbundled basis in a particular market? If the answer to this Interrogatory is in the affirmative, describe with particularity each

such economic barrier, and state all facts and identify all

documents supporting your contention.

Response:

BellSouth First Set of Interrogatories

DATED:

October 10, 2003

Interrogatory 83:

What is the maximum number of DS0 loops for each geographic market that you contend requesting telecommunications carriers can serve through unbundled switching when serving multilane end users at a single location that the Kentucky Public Service Commission should consider in establishing a "cutoff" consistent with FCC Rule 51.319(d)(2)(iii)(B)(4)? In answering this Interrogatory, please state all facts and identify all documents

supporting this contention.

Response:

## SUBMITTED this 15<sup>th</sup> day of December, 2003.

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AT&T's Responses to BellSouth's First Set of Interrogatories KPSC Docket No. 2003-00379 12/15/2003 Redacted Attachment No. 1a & 1b

# ATTACHMENT TO INTERROGATORY NO. 1

AT&T PROPRIETARY

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		Installed % T1 Ut					
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IONE, the owner		Switch CLLI					
s in Kentucky - N		Market					
A&T Local Switches in Kentucky - NONE, the ownership of the local switch in Kentucky was transferred to Comcast with the merger.		Switch Mar					

_					 				
	Capacity								
Assigned 11	Capacity								
	Switch Man.	Lucent	Nortel						
	Switch Class   Switch Man.   Capacity	4ESS							
	State	KY	ΚY						
	City	Louisville	Louisville						
	Switch CLLI								
Switch ADL-	Capable	YES	YES						

AT&T's Responses to BellSouth's First Set of Interrogatories KPSC Docket No. 2003-00379 12/15/2003 Attachment No. 34

## ATTACHMENT TO INTERROGATORY NO. 34



Research Brief
Wireline Telecommunications

April 30, 2003

T: \$17.05

Buy

Volatility: Medium

12-Month Target: \$24.00 Total Return to Target: 45.2%

AT&T Corporation\*
A Case for Consumer Services

- Our conclusion from a deep dive analysis of AT&T's Consumer segment is that moderating top-line losses, variable costs and low capex will allow the unit to remain a positive value contributor.
- We expect revenue loss trends to abate as Bell 271 entry matures. There is a mature record of data that supports a sharp decline in Bell market share growth in 2004 easing revenue pressures.
- The Consumer segment has substantial cost variability. The allocation
  of corporate overhead and network costs to the Consumer segment is small
  based on public disclosures and remaining expenses are dominated by
  variable access and marketing costs.
- We have incorporated new detailed UNE-P forecasts. We have modeled out projected market share gains, revenue and costs by state and estimated migration rates and costs for moving the UNE-P platform to facilities over time.
- ◆ Valuation and Target Price Analysis: Our target price of \$24 is the first rung of our valuation for AT&T. Our target starts from a conservative baseline of a 4.5x multiple of 2004E Business EBITDA and giving no value to the Consumer segment despite our analysis here.

**Sector View:** Underweight. A stagnant economy and sector-wide competition shrinking scale economies are boosting churn costs, pressuring margins and curtailing growth.

Sector Price Appreciation Potential (Median of Target Price): 25%

FYE Dec

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Top Picks										
Ticker	Rating	Price	Target							
T*	В	\$17.05	\$24.00							
BLS*	Ν	\$25.49	\$30.00							
Least Favorites										
BRW*	S	\$4.63	\$3.00							
Q*	S	\$3.77	\$3.00							
B = Buy,	N = Neutral,	S = Sell, *	= New Pick							

Company Data	
52-Week Range	\$29-13
Secular Growth (EPS)	N/A
Market Cap.	\$13.4 BB
Avg. Daily Vol.	6,699,912
Debt/Cap. (3/03)	58.8%
Est. Dividend/Yield	\$0.75/4.4%

Q4 (Dec) Fiscal Year	\$2.39	\$2.07	\$1.93
O4 (D)	0.66	0.45	0.50
Q3 (Sep)	0.75	0.48	0.49
Q2 (Jun)	0.71	0.52	0.48
Q1 (Mar)	\$0.61	\$0.62A	\$0.47

2002 A

2003E

2004 E

Index Data		Calendar Yr	\$2.39	\$2.07	\$1.93
DJIA	8480	P/E	7.1	8.2	8.8
S&P 500	917	P/E/G	N/A	N/A	N/A

Please see the important disclosures and analyst certification on page 38 of this report. Investors should assume that Banc of America Securities is seeking or will seek investment banking or other business from companies rated in this report.

### Summary and Investment Conclusion

In recent months, AT&T has come under intense scrutiny and criticism for its exposure to the Consumer segment. Concerns about the rate of decline within the segment are wholly justified and are the central reason why we undertook this analysis. No investment in AT&T should be made without a comprehensive understanding of the implications for AT&T's presence in the consumer market. The key questions we see are the following.

- What will happen to AT&T's Consumer revenue in light of Bell entry into long distance services?
- ♦ What will happen to margins as this segment's revenue declines?
- ♦ What impact will AT&T's entry into local services have on the Consumer unit?

Perhaps our most important conclusion is that AT&T's presence in the Consumer market does not jeopardize AT&T as a company. We conclude the Consumer segment revenue declines will slow as Bell entry into long distance markets follows a longestablished trend of peaking in year one. Consumer revenue declines will not cease, but as Consumer falls as a percentage of total revenue and LD voice falls as a percentage of Consumer, the impact of Consumer LD voice losses will become irrelevant to the core AT&T story in Business services. Now, as revenue declines or even flattens out, the worry must still be on margins. A high percentage of fixed costs could translate quickly to losses even with minimal revenue decline. Based on AT&T's own disclosures long available in the company's publications surrounding the AT&T Broadband spin-off, the allocation of fixed overhead costs to the Consumer unit is low and the percentage of remaining expenses that are variable appears high. The company's track record over the last several quarters in Consumer margins underscores this point. As Consumer Revenue declines slow, and Consumer falls as a percentage of total revenue and LD voice falls as a percentage of Consumer and as AT&T loses only a fraction of Consumer revenue at the EBITDA line, again, the impact of the Consumer segment at the margin fades in relevance. With low capital requirements, however, the Consumer unit can continue to make a substantial contribution at the free cash flow line and contribute positive value to the company.

At the center of our view is a mature track record of Bell entry into long distance, which shows the rate of market share gains by the Bells slows down over time. By 2004, we expect long distance revenue declines to slow as Bell market share gains anniversary and flatten out after the majority of the 1st year market share gains are taken. In addition, penetration of the local market contributes positively to the flattening of this curve. While Consumer is a falling percentage of the total revenue, long distance voice is a shrinking percentage of Consumer.

Through a series of charts and graphs, we have laid out our view that despite powerful forces working against it, AT&T's Consumer segment can continue to contribute positively to equity value. In this report, we take a deep dive into AT&T's Consumer operations, looking at revenue trends, cost variability, and the emergence of AT&T's Local business on the scene. In our view, AT&T's negative operating leverage exposure to this segment is not as substantial as many might suppose. While there is no denying the Consumer segment is in ongoing decline, we believe AT&T can continue to extract value from this business by offsetting revenue declines with a variable cost structure. We believe AT&T can offset a shrinking Consumer segment by weathering the

worst of the storm in 2003 and allowing its Business segment to pick up the slack over time (the focus of our next deep dive analysis).

Variable cost management and UNE-P growth will define the Consumer segment over time. We believe Consumer cost variability is much higher than the market believes, which should allow AT&T to continue to cut costs in Consumer to offset revenue declines and harvest cash from this business. Further, we expect revenue loss trends to abate as Bell 271 entry matures and expect the combined local and long distance operations to create positive value for AT&T shareholders. Management has so far shown the ability to reduce Consumer costs to match a declining revenue base and as we explain in detail in this report, we believe that there remains a large amount of variability in the Consumer model. We expect the Consumer segment to lose roughly \$0.30 of EBITDA on average for every \$1 revenue decline due to the small amount of fixed costs in the business, more in the short-run as the largest of the volume losses occur in 2003. In addition, since the Consumer segment requires minimal capital expenditures, we believe the company can continue to create free cash flow from this segment.

We have completed a comprehensive state-by-state UNE-P model. The ultimate fate of UNE-P will remain uncertain until the FCC releases its Final Order, which is now expected to be in mid to late May, but it is clear that UNE-P will remain in some fashion for several years to come. We have broken AT&T's UNE-P business down into granular detail to better understand the economics and AT&T's opportunity. Our UNE-P model ultimately derives the state-by-state EBITDA contribution from each of the nine states (plus D.C.) where AT&T currently offers service and from Massachusetts (the only additional state that AT&T has confirmed a plan of entry). In addition, our model includes estimates for the five most attractive new states (based on estimated state-by-state gross margins derived from the most recent data from the NRRI) and the last group of four to seven states that will bring AT&T to the midpoint of its target market of 19-22 states.

We expect AT&T's revenue mix to continue to favorably shift towards Business from 71% of total revenue in 4Q02 to 79% by 4Q04. Consumer will decline substantially, but should continue to provide FCF to support growth in Business. AT&T continues to emerge as the dominant player in Business services and remains the purest play on business services demand and business recovery.

We derive a \$3 per share value for the Consumer segment, but conservatively assign no value to the Consumer segment in our consolidated AT&T valuation. Our \$24 price target for AT&T is based on a 4.5x multiple of our 2004E Business EBITDA using 2004 estimated net debt and gives no value to the Consumer segment. Our \$3 per share valuation for the Consumer segment assumes Consumer long distance-related capex will remain constant at \$150 million per annum, assumes substantial local capex in 2004 (\$364 million) and 2005 (\$400 million) to migrate UNE-P subscribers to a facilities based network, and assumes local maintenance capex of roughly \$100 million per annum (5% of local revenue). In total, we project Consumer capex of 6.6% of revenue in 2004, 7.9% in 2005, and 4.8%-5.5% in the steady state. Our FCF estimates for the Consumer segment subtract capex estimates from our tax effected EBITDA estimates. We project Consumer FCF of \$1.2 billion in 2003, \$504 million in 2004, and \$356 million in 2005 (lower due to assumed migration capex requirements). Longer term, we believe the Consumer segment can generate FCF of roughly \$400-\$500 million per year.

### **Consumer Segment Discounted Cash Flow Analysis**

(\$ millions)

_	2002	2003E	2004E	2005E	2006E	2007E	2008E	2009E	2010E	2011E	2012E
Local EBITDA	(85)	34	156	235	324	367	382	399	405	422	429
Long Distance/Prepaid Card EBTIDA	2,928	2,169	1,541	1,275	1,061	929	848	780	737	692	657
WorldNet EBITDA	0	0	0	0	0	0	0	0	0	0	0
Total Consumer EBITDA	2,843	2,202	1,697	1,510	1,386	1,296	1,230	1,179	1,142	1,114	1,086
Tax Effected EBITDA	1,706	1,321	1,018	906	831	778	738	707	685	668	652
LD capex	127	150	150	150	150	150	150	150	150	150	150
Migration capex			364	400	61	40	37	27	32	16	8
Local maintenance capex					95	100	103	106	108	110	111
Total Consumer capex	127	150	514	550	306	290	290	283	290	276	269
note: % revenue	1.1%	1.6%	6.6%	7.9%	4.8%	4.8%	5.1%	5.2%	5.5%	5.4%	5.4%
Consumer FCF	1,579	1,171	504	356	525	487	447	425	395	392	383

PV of Consumer FCF 2,314
Consumer Value Per Share \$2.94

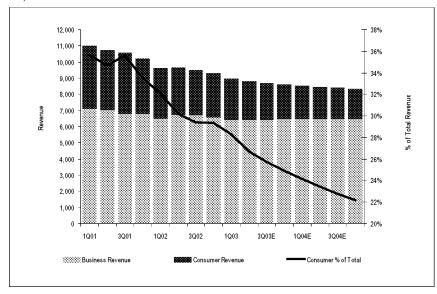
Source: Company reports, Banc of America Securities LLC estimates.

### A Case for Value in AT&T's Consumer Segment

#### Consumer Will Shrink In Importance to the AT&T story

#### AT&T Consumer vs. Business Revenue

(\$ millions)



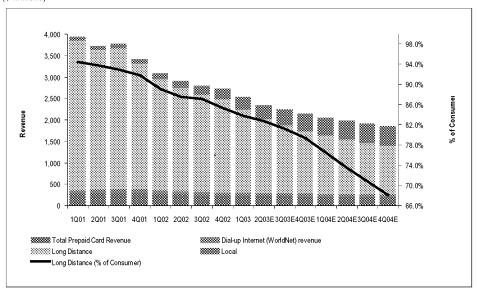
Source: Company reports, Banc of America Securities LLC estimates.

We expect AT&T's Business services to continue to evolve into the dominant segment of AT&T's total revenue picture. We conservatively project minimal Business services growth through 2004 (from \$6.4 billion in 1Q03 to \$6.5 billion by 4Q04). Conversely, we expect Consumer revenue to fall substantially through 2004 (from \$2.5 billion in 1Q03 to \$1.9 billion in 4Q04). In 4Q02, Consumer represented 29% of total AT&T revenue. By 4Q04, we project Consumer to represent just 22% of total AT&T revenue, and by 4Q06, just 19% of total revenue. Over the long run, it is clear that Business services performance will be the key to AT&T's success. However, we do expect the Consumer segment, while declining, to nonetheless continue to provide free cash flow to support the growth of the Business segment. The proceeding chart illustrates the dynamics of AT&T's evolving business mix toward the Business services segment and away from the Consumer segment. AT&T's larger proportionate exposure to Business services and the company's emergence as the dominant player in Business services (the highest growth portion of the telecom sector) makes AT&T, in our view, the purest play in the sector on business and business recovery.

#### Local UNE Revenue Growth Will Help Offset LD Voice Declines

#### Components of Consumer Revenue

(\$ millions)



Source: Company reports, Banc of America Securities LLC estimates.

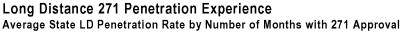
We continue to forecast significant declines in the long distance segment for AT&T, partially offset by gains on the local front. The trends suggest that long distance revenue should continue to shrink as a percentage of Consumer revenue and Local revenue should continue to become a bigger piece of the Consumer model. In our view, Bell entry into the long distance market (through the Section 271 approval process) and wireless substitution will continue to weigh on AT&T's long distance results. As such, we have accordingly modeled in substantial revenue losses from AT&T Consumer long distance. We currently project a 26.6% decline in long distance Consumer voice and prepaid card revenue in 2003 followed by a 23.5% decline in 2004. However, growth in the Local business, through AT&T's UNE-P strategy, should offset a small portion of the long distance declines. We forecast local revenue growth of 77.8% in 2003 and 28.6% in 2004. As a result, we expect Local revenue to increase from 9.2% of Consumer revenue in 4Q02, to 18.5% by 4Q03 and to 24.8% by 4Q04.

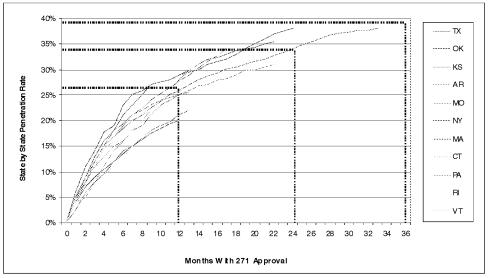
While the FCC's Final Order on UNE-P has not been released, based on the details the FCC has provided to date, the decision appears to be a big win for AT&T. We do not expect the Final Order from the FCC to be released until late mid to late May. Nonetheless, the FCC's preliminary decision appears to extend the life of UNE-P, the primary competitive local entry method to date. Importantly, the decision buys AT&T the valuable commodity of time—time to take increased local market share, time to develop scaled and concentrated local customer bases, and time to develop a facilities migration plan to eventually transition away from UNE-P in the long run. AT&T should be able to continue to expand its local consumer customer base through UNE-P for perhaps an additional two years beyond our pre-Triennial Review expectations. AT&T can also push off any local facilities capital spending decisions for two years more than previously expected before it will need to transition to a facilities-based (UNE-L) solution. AT&T will now be able to observe how the local telecom market plays out over the next couple

years before it will need to either begin to spend capital on a local infrastructure or develop an alternative plan.

The UNE-P business model allows AT&T to grow its local customer base with solid economics, building a scaled base upon which a facilities model may be overlaid. AT&T's approach to launching local service has been very granular. AT&T's "cherry picking" approach has drawn Bell ire but it has worked. The company targets expansion by state, by neighborhood, and by profit hurdle, experiencing substantial success in the process. AT&T now offers local service in eight states and Washington D.C. to 2.8 million local customers through UNE-P as of 1Q03. Last week, AT&T announced a 5 state increase in its UNE-P expansion plans. The company is now targeting UNE-P offerings in a total of 19-22 states by the end of 2003, continuing to focus on a goal of profitability within two years of offering service. The extra two years the FCC appears to have provided AT&T could give the company ample time to take substantial local share and harvest strong free cash flow from this business. Further, adding more local customers could help stem losses on the long distance side of its business through lower potential churn since the company will be able to offer a combined local and long distance bundled offering to a larger customer base.

#### Bell LD entry: Share Gains Slow Rapidly After Early Entry...





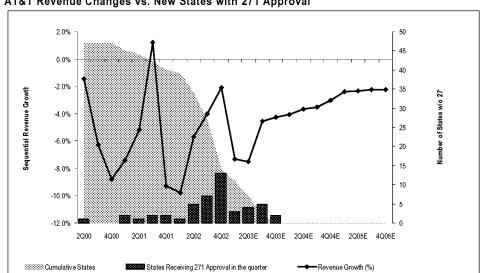
Source: Company reports, Banc of America Securities LLC estimates.

Bell market share gains taper off considerably after one-year of FCC approval to offer in-region long distance services. Thus, the impact of Bell entry into the long distance market on AT&T's LD business should decline considerably after 2004. Current data suggests Bell state-by-state market share gains taper off substantially after the first year and even more so after the second year following receipt of Section 271 approval from the FCC. As the chart above illustrates, the Bells have historically picked up roughly 20-25% market share in the first year following 271 approval. However, the average market share gain falls to 7-10% in year two and falls to 5-6% in year three. The natural

evolution of market share gains for the Bells appears to top out at around 40% at the end of year three. This suggests that the biggest negative impact on AT&T's long distance business is happening right now and will not last in perpetuity due to the declining market share growth of the Bells following the initial spike in the first year of offering long distance services.

#### So We Expect AT&T Consumer Revenue Declines to Slow in 2004

# Consumer LD Sequential Revenue Changes AT&T Revenue Changes vs. New States with 271 Approval



Source: Company reports, Banc of America Securities LLC estimates.

The majority of the large state 271 approvals have already been granted and the final wave of 271 approvals is expected to be completed in the summer, save for one or two problem states that could push the completion of the process into late 2003. We expect the Bells to take their expected 20-25% first year market share in the new states upon receipt of 271 approval and to continue to take market share in the states that have had 271 approval for longer periods of time. Thus, we expect the impact on AT&T's Consumer segment from 271 approvals to be substantial 2003, especially given the large number of state approvals in late 4Q02 and the December 2002 approval of California (the largest state in the U.S.).

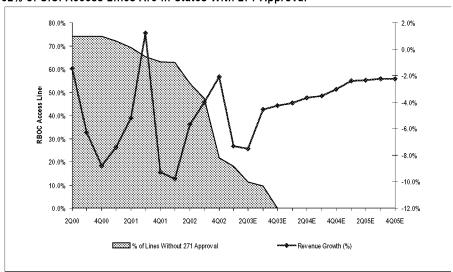
We expect the impact on AT&T from Bell entry into the long distance market to peak in 4Q03. AT&T will continue to feel the impact of Bell market share gains throughout 2003. However, based on the trends of diminishing market share gains the Bells have experienced to date, we expect the impact of the last wave of 271 applications on AT&T's long distance revenue to peak in 4Q03 in terms of year over year revenue declines. Thus, we do not believe AT&T's Consumer long distance revenue in the out-years will decline at rates similar to the steep declines we forecast for 2003 (26.6%) and 2004 (23.5%), since we expect the majority of Bell market share gains to be taken by the end of 2004. However, we expect these declines to continue at moderating rates, with our current forecast for Consumer LD revenue declines of 16.5% in 2005 and 14.4% in 2006.

Further supporting our belief that the Bell impact on AT&T will peak in 2003 is the fact that 82% of Bell access lines currently have approval to offer long distance

services. Currently, the Bells have had long distance freedom at least two years in 5 states plus the 18 former GTE states, covering roughly 31% of all Bell access lines in aggregate. The Bells are already in year three of the market share curve in these states, and thus most of the market share gains have been made. In our view, these states (New York, Texas, Oklahoma, Connecticut, Massachusetts, and Verizon's former GTE states) should have a minimal impact on AT&T with respect to future market share gains, since most of the damage has already been done. Currently, 37% of Bell access lines have had long distance freedom for more than one year. By mid-May, an additional 4% of Bell lines will cross the one-year hurdle, brining the total to 42% of Bell access lines that have achieved peak market share gains. In 4Q02, the FCC granted 271 approval to states covering 23% of all Bell access lines. Therefore, by the end of 2003, 78% of all Bell access lines will have completed at least one year of market share gains. Again, based on market share gain trends in existing Bell states, we believe that the impact to AT&T will peak in 4Q03, in conjunction with the one year anniversary of the large number of 4Q02 271 approvals. We expect the Bells to attain approval in the remaining 18% of their aggregate access lines throughout 2003. The impact on AT&T from market share losses in these states will continue through 2004. However, we expect the revenue declines for AT&T's Consumer LD segment to slow 12 months after the completion of the majority of the 271 process.

In the previous chart, we showed the cumulative states that have received 271 approval, the number of states that remain versus our sequential revenue decline estimates for AT&T's consumer. In the following chart, we replaced the shaded area representing the cumulative number of states without 271 approval with the cumulative number of access lines without 271 approval. The result was a nearly identical picture, illustrating how the total access lines receiving state approval has nearly identically matched the number of states receiving approvals. This implies that the remaining states without 271 approval are proportionate to the remaining access lines. Michigan (3.4% of U.S access lines), Wisconsin (2.6%) and Illinois (4.3%) are the only larger RBOC states left, with the remaining eight states each containing less than 1.5% of total U.S. access lines.

# Access Line Totals Match State Approvals Almost Identically 82% of U.S. Access Lines Are in States With 271 Approval



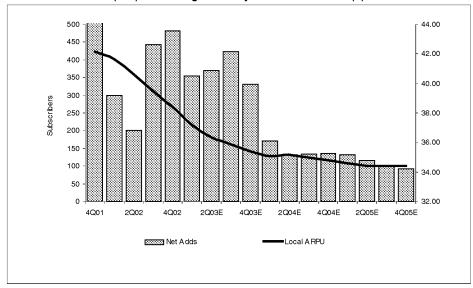
Section 271 Approval (Long Distance) Summary (Lines in 000)

State	Company	271 Approval Date	% of total RBOC lines	Cumulative % of RBOC lines w/ 271 Approval	Cumulative RBOC lines w/ 271 Approval	Remaining RBOC lines for 271
				•	• •	
Total Former GTE (VZ)	Verizon	NA	11.0%	11.0%	17,305	140,514
Connecticut (SNET)	SBC	NA 10/00/00	1.5%	12.5%	19,661	138,158
New York*	Verizon	12/22/99	7.4%	19.8%	31,282	126,536
Texas	SBC	6/30/00	6.2%	26.0%	41,103	116,715
Kansas	SBC	1/22/01	0.8%	26.9%	42,433	115,38
Oklahoma	SBC	1/22/01	1.0%	27.9%	44,027	113,791
Massachusetts	Verizon	4/16/01	2.7%	30.6%	48,320	109,498
Pennsylvania (fBA)	Verizon	9/19/01	3.9%	34.5%	54,489	103,329
Arkansas	SBC	11/16/01	0.6%	35.2%	55,488	102,330
Missouri	SBC	11/16/01	1.7%	36.8%	58,094	99,724
Rhode Island	Verizon	2/24/02	0.4%	37.2%	58,710	99,108
Vermont	Verizon	4/17/02	0.2%	37.4%	59,081	98,737
Georgia	BLS	5/15/02	2.7%	40.1%	63,302	94,516
Louisiana	BLS	5/15/02	1.5%	41.6%	65,690	92,128
Maine	Verizon	6/19/02	0.5%	42.1%	66,435	91,383
New Jersey	Verizon	6/24/02	4.2%	46.3%	73,122	84,696
Alabama	BLS	9/18/02	1.3%	47.6%	75,122	82,696
						,
Kentucky	BLS	9/18/02	0.8%	48.4%	76,375	81,443
Mississippi	BLS	9/18/02	0.9%	49.3%	77,743	80,076
North Carolina	BLS	9/18/02	1.6%	50.8%	80,248	77,571
South Carolina	BLS	9/18/02	1.0%	51.8%	81,757	76,061
New Hampshire	Verizon	9/25/02	0.5%	52.3%	82,533	75,285
Delaware	Verizon	9/25/02	0.4%	52.7%	83,143	74,675
Virginia (fBA)	Verizon	10/30/02	2.3%	54.9%	86,702	71,116
California	SBC	12/19/02	11.3%	66.3%	104,605	53,213
Florida	BLS	12/19/02	4.2%	70.5%	111,190	46,628
Tennessee	BLS	12/19/02	1.7%	72.2%	113,879	43,939
Washington	Q	12/27/02	1.9%	74.1%	116,905	40,914
Colorado	Q	12/27/02	1.4%	75.5%	119,167	38,651
lowa	Q	12/27/02	0.7%	76.2%	120,280	37,538
Utah	Q	12/27/02	0.6%	76.8%	121,207	36,611
Nebraska	Q	12/27/02	0.5%	77.3%	121,959	35,859
Idaho	Q	12/27/02	0.4%	77.7%	122,550	35,268
Montana	Q	12/27/02	0.3%	77.9%	122,975	34,843
North Dakota	Q	12/27/02	0.2%	78.1%	123,228	34,591
Wyoming	Q	12/27/02	0.1%	78.2%	123,437	34,381
Maryland	Verizon	3/17/03	2.5%	80.7%	127,419	30,399
Washington D.C.	Verizon	3/17/03	0.6%	81.4%	128,422	29,397
West Virginia	Verizon	3/17/03	0.5%	81.9%	129,283	28,535
Nevada	SBC	4/14/03	0.2%	82.2%	129,667	28,151
New Mexico	Q	4/15/03	0.5%	82.7%	130,455	27,363
Oregon	Q	4/15/03	1.1%	83.7%	132,132	25,686
South Dakota	Q	4/15/03	0.2%	83.9%	132,405	25,413
Total 271 Approved Lines			83.9%	83.9%	132,405	25,413
Unapproved States						
Minnesota	Q	FCC decision due 6/26/03 W/D- Expected Re-filing	1.5%	88.8%	140,075	17,743
Michigan	SBC	5/03	3.4%	87.3%	137,767	20,051
Arizona	Q	Expected filing by 5/03	1.6%	90.3%	142,545	15,273
Wisconsin	SBC	Expected filing by 7/03	1.3%	91.6%	144,630	13,188
Wisconsin	SBC	Expected filing by 7/03	2.6%	94.2%	148,702	9,116
Illinois	SBC	Expected filing by 9/03	4.3%	98.5%	155,505	2,313
Indiana	SBC	Expected filing by 9/03	1.5%	100.0%	157,818	
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## Local Revenue Estimates Factor in Slowing Adds and Falling ARPU

#### Local Revenue Drivers

Net Subscriber Adds(000) vs. Average Monthly Revenue Per User (\$)



Source: Company reports, Banc of America Securities LLC estimates.

We conservatively estimate that AT&T's largest net subscriber gains occurred in 4Q02. Our state-by-state UNE-P model (details of the model are discussed later in this report) suggests that net adds (gross subscriber adds less churn) should taper off following a strong fourth quarter. The final details of AT&T's UNE-P plan will not likely emerge until the FCC releases its Final Order (expected in late mid to late-May). Accordingly, at this time we believe conservative net add estimates are appropriate. Should the FCC's Final Order allow AT&T greater latitude on the UNE-P front, we would expect AT&T to more aggressively attack the local market and the results of this effort would show in greater net adds in future quarters.

Churn is a key driver of the decline in net adds. MCI disclosed in an ex-parte bankruptcy court filing on November 15, 2002 that it is experiencing high levels of monthly churn for its local and long distance bundled "neighborhood" subscribers. On average, MCI loses 25% of its Neighborhood customers within three months (9.1% monthly churn) and 50% within six months (12.7% monthly churn in months 4, 5 and 6). After six months the monthly churn drops substantially to 4-6% per month. AT&T management has indicated that churn for AT&T's local business resides much closer to that in the cellular industry but still above this level. We estimate AT&T monthly local churn at 4.6%, which implies an annual churn rate of 42.8% of its customer base. We would note there is a substantial divergence in acquisition strategy between MCI and AT&T in terms of breadth with MCI mounting a substantial national telemarketing campaign and AT&T limiting its coverage to select geographies and customer segments.

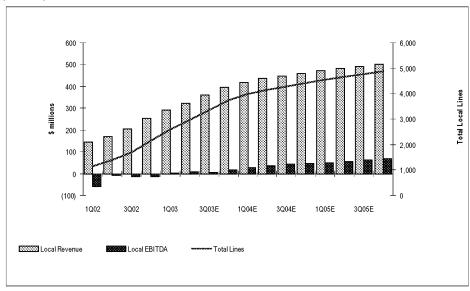
AT&T churn will be inherently higher than that of the Bells. The Bells are fighting their own churn with a concerted local effort focused on bundled offerings including local, LD, regional calling, DSL, and/or wireless. The Bell win-back campaigns are not focused on lower prices, but are focused on offering a bundled package of services on one bill. Further, AT&T still experiences difficulty getting the Bells to switch customer bills

in a timely manner, getting dial tones for new customers from the Bells, and completing the switch from the Bell to AT&T. The negative experiences of some customers within the switching process will yield higher churn rates for AT&T and give the Bells a higher retention rate. The 4.6% average churn rate assumed for AT&T we believe is appropriately proportional to the average cellular churn rate of 2.4% for the big six wireless companies. Including the smaller wireless carriers and affiliates, the wireless churn rate is roughly 2.6%. We believe the wireless churn rate is a relatively close proxy for local churn, although we would expect local churn to be higher than wireless churn. The lack of local number portability is a solid churn defense for the wireless companies (LNP is available for local service) and is only partially offset by service and network issues facing wireless carriers. In combination, the win-back campaign success of the Bells coupled with the ability of the Bells to drag their feet on the procedural front should hinder the long distance companies in substantially reducing the churn of its UNE-P local subscriber base.

## Local EBITDA Will Begin Contributing in Late 2003

## Local Revenue and EBITDA Growth

(\$ millions)



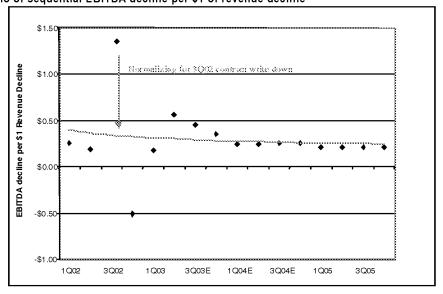
Source: Company reports, Banc of America Securities LLC estimates

Local EBITDA should become a steady contributor to AT&T's total EBITDA. In the near term, we expect AT&T to continue to expand its local customer base. As this local footprint grows, AT&T should benefit from scale and margins should improve. Longer term, we estimate AT&T can generate 54% gross margins and 17% EBITDA margins from the local business. Accordingly, we estimate the local segment will produce EBITDA of roughly \$50 million per quarter by 2004. In our view, the EBITDA generated by the local business is really the smaller of the two benefits to AT&T from the local business. The real benefit to AT&T from its local offering stems from the potential lower churn in its long distance business. With the RBOCs rolling out unlimited bundled local, long distance and regional calling plans, AT&T needs a product to compete in today's changing wireline telecom market. AT&T is able to offer the same bundled calling package as the RBOCs, which should slow, but not stop, the market share gains of the RBOCs. AT&T has primarily targeted states where UNE-P pricing is competitive

(i.e. can supports at least a 45% gross margin). However, the company has also focused on entering big states where the RBOCs have already attained 271 approval or are in the process of doing so. Finally, AT&T has focused on the Ameritech states, where SBC has had difficulty with the 271 process, which should allow AT&T to build market share and establish a solid customer foundation in place prior to SBC entering the market.

## We Expect Continued Consumer Cost Variability...

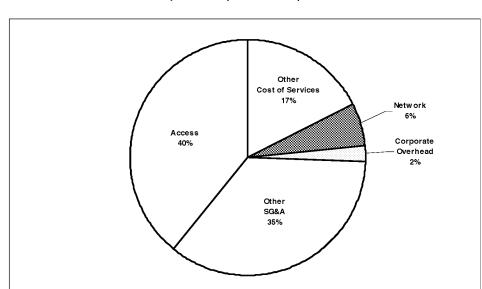
# Variabilizing Costs in Consumer Ratio of sequential EBITDA decline per \$1 of revenue decline



Source: Company reports, Banc of America Securities LLC estimates.

We believe AT&T will continue successfully offsetting a large portion of revenue declines with cost reductions in the Consumer segment. Managing costs is a crucial component of maximizing Consumer EBITDA, especially given our forecasts for substantial revenue declines. AT&T has been successful in cost rationalizing in the past, giving us confidence that the company can do so going forward. For every \$1 revenue decline, the Consumer segment lost just \$0.26 in 1Q02 and 0\$.18 in 2Q02. In 3Q02 the loss of a large pay phone contract caused the Consumer segment lose \$1.35 of EBTIDA for every \$1 revenue decline. Normalized to remove this one-time event, we believe 3Q02 was likely in line with 1Q02 and 2Q02. In 4Q02, the company was actually able to grow its Consumer EBITDA despite continued revenue declines, increasing EBITDA by \$0.51 for every \$1 it lost in revenue. In 1Q03, the company reported a \$200 million revenue decline in Consumer, but only a \$35 million decline in EBITDA, supporting or main thesis that the company can indeed variabilize costs and keep EBITDA declines relative to revenue declines at 2002 levels. The company noted that 1Q03 margins were improved by delayed marketing expenditure tied to the Gulf War and we project that the company's variabilization will ease in appearance in 2Q03. That said, as volume declines subside, we expect the unit's variability to re-emerge as cost cuts catch up with realized losses in 2004.

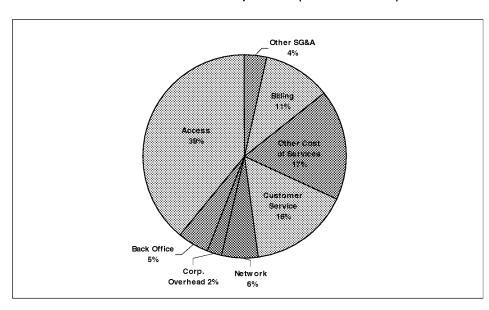
## Based On AT&T's Cost Disclosures



# 2001 Consumer Cost Components (AT&T Data)

Source: Company reports, Banc of America Securities LLC estimates.

# 2001 Additional Consumer Cost Components (BAS estimated)



Source: Company reports, Banc of America Securities LLC estimates.

# There are two big pieces of information to be gleaned from this analysis.

First, there is a relatively small amount of shared expenses in Consumer that could be re-allocated to Business to affect margins there.

Second, there appears to be a high degree of variability in the strictly Consumerrelated expenses.

The extent to which AT&T can variabilize its costs will be the mitigating factor in the Consumer segment's ability to generate cash. It is therefore crucial to examine these costs in as great detail as possible given the company's tight disclosure on these items. AT&T breaks its costs down into three main categories—Access Costs, Costs of Service and Products, and SG&A. Based on our conversations with the company and our own estimates, we further break these costs into eight categories:

## **AT&T Consumer Cost Categories**

Access Costs	(given)
Costs of Services and Products Network * Other Costs of Services	<b>(given)</b> (given) (given)
Sales General & Administrative Billing Customer Service Corporate Overhead * Back Office Other SG&A	(given) (estimate) (estimate) (given) (estimate) (estimate)
* Data for 2000 and 2001 provided in proxy statements	

Source: Company reports, Banc of America Securities LLC estimates.

We base our cost breakdown on information provided in the proxy statements for the periods leading up to the Broadband spin off and the details provided with respect to the aborted Consumer Services Group tracking stock spin-off. In these proxy statements, the company disclosed Consumer network and corporate overhead expenses. Network costs are booked in cost of services and corporate overhead is booked in SG&A. Within the SG&A expense line item, the company only provides total SG&A expense and the corporate overhead expenses. Thus, we estimated the breakdown of SG&A between billing, customer service, and back office. Further, since the company does not provide this level of detail in its standard filings, we only have the details of these costs for 2000 and 2001. We assumed the percentage allocation of the SG&A expense items will be similar in 2002 going forward. The only substantial potential impact to this assumption is the change in access charge rates that has taken place under the CALLS proposal which will have compressed access costs in 2002 vs. 2001. That said, access charges fell commensurately with AT&T's other Consumer cost components into 2002 and the percentage of total costs remains generally the same.

In our view, the key to this cost breakdown is the determination of the fixed costs in this equation, which are Network and Corporate Overhead costs. The estimated allocation between Billing, Customer Service, Back Office and other SG&A is not as crucial to understanding the cost structure, since the majority of the costs in these items appear to be quite variable in nature. Thus, we believe we can look at these costs as a group of primarily variable costs. As such, we believe AT&T can reduce Access, other costs of Service, Billing, Customer Service, Back Office and Other SG&A costs to match declining revenue, although the nature of these costs will make it difficult for the company to precisely time these cost reductions.

BAS Estimated Consumer Cost Breakdown 2000, 2001 and 2002

	Fixed/	Actual/	Co	Cost Breakdown			Cost Breakdown		
	Variable	Estimate	2000	2001	2002E	2000	2001	2002	
Access	Variable	Actual	5,120	3,995	3,257	43%	39%	38%	
Network	Fixed	Actual	846	601	500	7%	6%	6%	
Other Cost of Service	Variable	Actual	1,711	1,781	1,507	14%	17%	18%	
Total Cost of Services		Actual	2,557	2,382	2,007	22%	23%	24%	
Corp. Overhead	Fixed	Actual	244	234	234	2%	2%	3%	
Billing	Variable	Estimate	1,240	1,100	900	11%	11%	11%	
Customer Service	Variable	Estimate	1,800	1,600	1,300	15%	16%	15%	
Back Office	Variable	Estimate	540	500	400	5%	5%	5%	
Other SG&A	Variable	Estimate	304	371	412	3%	4%	5%	
Total SG&A		Actual	4,128	3,805	3,246	35%	37%	38%	
Total Costs		Actual	11,805	10,182	8,510	100%	100%	100%	

Source: Company reports, Banc of America Securities LLC estimates

## **Access Costs**

Access Costs. In the Consumer segment, access costs represent the largest cost to the company (39% of Consumer costs in 2001). Since these costs are based primarily on minutes of use, they are almost entirely variable to volume losses, which is the biggest issue when contemplating Bell 271 entry. A small component of access costs are fixed, including some contractual term and volume conditions with the Bells for special access (which is actually more likely in Business than Consumer) and fixed costs for WorldNet, AT&T's dial up Internet service. AT&T pays the Bells roughly \$0.0055 on each end for terminating and originating voice traffic based on the CALLS rate, which is inclusive of tandem fees. In addition, AT&T pays universal service. In the non-Bell footprint (mostly RLECs), the CALLS rate is not used and AT&T pays NECA rates which can range well above CALLS rates. For AT&T, term and volume are not useful in attaining substantially better rates and the company will need to develop its own footprint to make any dent in the access cost component. We expect AT&T's access charges to decline proportionally with declines in minutes of use.

### Costs of Services and Products

**Network Expenses.** For Consolidated AT&T, the network expense is generally a fixed cost. However, for the Consumer segment, the costs are variable. AT&T's Consumer segment purchases network related services from AT&T Business at cost-based prices, which approximate market based prices. The amount of network-related services the Consumer segment realizes is a function of usage. As such, the network costs for the Consumer segment are variable. However, for the consolidated AT&T, the costs are more fixed since the Business segment will pick up the difference between actual network costs and what it receives from the Consumer segment. Essentially, the Business segment owns and operates the network, selling services to Consumer at a price per minute basis. According to the May 2002 proxy, the Consumer segment purchased network services totaling \$1.249 billion in 1999, \$846 million in 2000, and \$601 million in 2001. These inter-company items are booked as elimination of expense items and are not booked as revenue for the business unit. There are no inter-company payables for these services as

amounts are deemed to be settled in cash. For 2001, network services costs of \$601 million represented 25.2% of the \$2.38 billion cost of services total.

**General costs of services (i.e. excluding Network Expenses).** Cost of services, excluding Network services, represented 74.8% of the cost of services expense in 2001. These costs include other non-transport costs of services such as printing of pre-paid cards, information operators, and bad debt expense. We believe these costs are highly variable for AT&T Consumer.

## Sales, General, and Administrative (SG&A)

A constant concern of the investors has been that the Consumer segment contains hidden fixed costs that the Business segment, and the consolidated AT&T will need to support as the Consumer segment shrinks. In our study of the cost structure of the Consumer segment, our conclusion is that this fear is not supported by the data.

SG&A expenses include billing, customer service, back office, corporate overhead expenses, advertising, research and development, and general and administrative expenses. By and large, these costs are at least partially variable. AT&T has already reduced its SG&A run rate by reducing headcount and the company plans to continue to use headcount reduction as a means to cut SG&A expenses, targeting 3,500 additional layoffs in 2003. However, there is a time lag with respect to the impact of layoffs on the financial statements. Management indicated that it takes several months to match revenue with headcount. Thus, AT&T must walk the fine line of managing headcount to stay just ahead of the curve. That said, once cutting has begun, whether it relates directly to the current period or to prior periods, each quarter it will have a beneficial effect. In aggregate, SG&A represented 35% of revenue in 2000, 37% in 2001 and 38% in 2002, slight increases as a percentage of revenue since 2000. However, considering AT&T Consumer revenue declined 47% from 2000 to 2002, it appears the company has indeed been successful in reducing SG&A costs as revenue falls.

Billing. Billing expenses are both variable and fixed. Lost customers yield variable billing costs, since the company has one less monthly bill to handle and one less customer to monitor. Thus, as the RBOCs continue to take market share, we expect AT&T to reduce its billing costs since it will compile, distribute and collect fewer monthly bills. However, billing costs from existing customers simply making fewer calls are not variable. While AT&T has been in the billing business for many years and has made advances in the process, there are still specialized firms that can handle the process more efficiently. As a result, AT&T began a process to look for outside help in billing and collections. In April 2003, AT&T executed on half of this initiative through a 5-year \$500 million extension to its existing agreement with Accenture in January 2003 to further reduce costs by preparing for bill collection and other issues in the Consumer segment. We believe AT&T continues to search for a strategic partner for its billing operations. We estimate billing costs to represent 11% of total Consumer costs.

**Customer service.** AT&T Consumer Services uses an integrated sales and service team to solicit and handle customer contact opportunities. The customer care centers consist of a network of internal and external vendors and AT&T generally pays its vendors based on a contracted hourly rate and some on a pay-for-performance scale methodology. AT&T has a total 22 service centers, of which ten are operated by AT&T and 12 are outsourced to outside vendors. In 2002, these service centers handled 9 million calls per month.

On January 15, 2002, AT&T undertook a substantial step in variabilizing its cost structure through outsourcing a portion of it customer service requirements to Accenture (ACN, \$15.79, N/R) in what is termed its 'co-sourcing' arrangement. AT&T signed a five year, \$2.6 billion "co-sourcing" agreement with Accenture in which the two companies agreed to work together to transform AT&T Consumer's long distance sales and customer care operation. AT&T retained responsibility for establishing strategic business direction, defining marketing strategies and designing product offerings. Accenture was brought in to provide new technology development and ongoing management direction to increase operational efficiency, reduce costs, and improve productivity and flexibility. At the time of the deal, AT&T expected the contract to reduce sales and customer care costs by more than half over the life of the agreement. Accenture provides personnel to lead the effort and implement technology and process improvements. We estimate customer service costs to represent 15% of total Consumer costs.

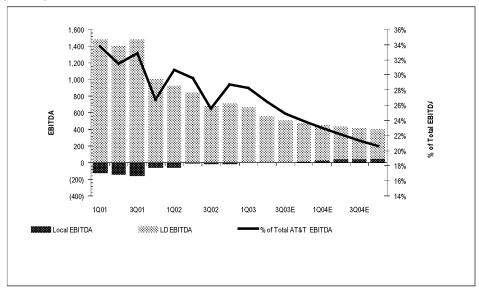
**Back office.** AT&T outsources a meaningful portion of its back office IT functions to a number of specialized companies. The expense to AT&T as a result should vary with volume and customer counts. As the number of customers falls, the amount of back office support required should fall as well. We estimate that back office services represent 5% of total Consumer costs.

General corporate overhead expenses (allocated). AT&T allocates general corporate overhead expenses to both the Business and Consumer segments. These costs are included in SG&A and for the Consumer segment totaled \$234 million in 2001, \$244 million in 2000, and \$335 million in 1999. We expect these costs to remain fairly constant for AT&T in the near term and thus, do not expect to see substantial variability in this expense item. General corporate overhead represented 2% of total Consumer costs in 2000 and 2001.

## Declines in EBITDA Will Continue But at a Decelerating Rate

#### Consumer EBITDA Estimates

(\$ millions)



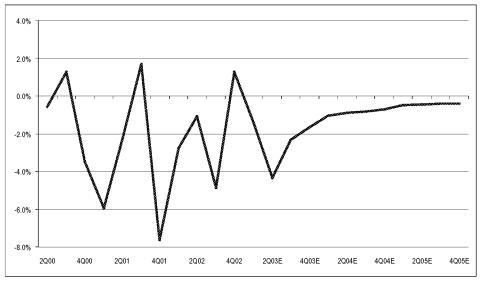
Source: Company reports, Banc of America Securities LLC estimates.

In two years we expect the Consumer segment to represent less than 20% of total AT&T EBITDA, with the remainder coming from Business services. In our view, the Consumer segment's contribution to overall EBITDA will decline in perpetuity, minimizing the importance of this segment to the long term picture. For 2003, we estimate a 22.5% Consumer EBITDA decline, from \$2.8 billion in 2002 to \$2.2 billion in 2003. For 2004, we expect even greater percentage declines. We project Consumer EBITDA to fall 23.0% in 2004 to \$1.7 billion. Conversely, we project Business EBITDA to fall much slower in 2003, by 15.3% to \$6.4 billion and by 3.1% in 2004 to \$6.2 billion a level very consistent with the Bells at substantially cheaper valuation.

We note that while we do forecast significant declines in Consumer EBITDA, we do not expect the declines will be felt in perpetuity, since in our view the Bells cannot take market share at current rates forever. Thus, after 2004, we expect the annual EBITDA decline in Consumer to drop from 23.0% in 2004 to 11.0% in 2005. We expect the Consumer EBITDA declines to reach a steady state 3-6% decline by 2007, which in our view would still leave roughly \$1.0-\$1.3 billion per annum in EBITDA from this segment. For the Business segment, we expect EBITDA growth longer term, as the economy moves along the business cycle and demand increases, although our estimates remain conservative for the company. We project Business EBITDA growth of 2.4% in 2005, 1.3% in 2006, and 1.5% in 2007. While this is a longer term outlook than most investors appear to be taking, we believe that the longer term business mix at AT&T is going to improve and the company will generate EBITDA growth in the long run as a result.

## Declines In Consumer Will Fade In Relevance To Earnings





Source: Company reports, Banc of America Securities LLC estimates.

As Consumer becomes a smaller part of the company, we expect the headwind from Consumer EBITDA losses to also decline. The output of multiplying EBITDA as a percentage of total EBITDA times the rate of EBITDA is the Consumer headwind. As the headwind percentage falls, so does the rate of EBTIDA growth required by the larger Business segment in order to compensate for Consumers declines. As Consumer EBITDA as a percentage of total EBITDA shrinks, the sequential declines in this segment will have a smaller impact on overall results, and thus the headwind approaches zero.

# State-By-State AT&T UNE-P Model

We have constructed a state-by-state UNE-P model for AT&T for purposes of inclusion in our AT&T financial model. In our UNE-P model, we have broken down AT&T's local customer base into states where AT&T currently offers service and guesstimated new states we believe could be next on the radar screen for the company (including the recently announced state of Massachusetts). We base our model on the limited disclosures from the company regarding customer demographics, UNE-P related data points published by the National Regulatory Research Institute (NRRI) in January 2003, and several key assumptions based on details provided by management in press releases, public documents, and conference calls over the past several quarters. To date, AT&T has not disclosed total UNE-P customers by state, but has disclosed total customers by quarter and other market share data. The company also disclosed in January that it reached a mid single digit market share in all states where it offered service at the end of 2002. Based on this information and our analysis of data provided by AT&T at its UNE-P investor day in September 2002, we constructed our view of AT&T's state-by-state customer totals and forward looking estimates.

For each state, the NRRI pricing study served as the base for our UNE-P rate and average revenue per customer assumptions. Our average UNE-P cost estimate in each state is the weighted average sum of the loop, port, switching and transport rates in zones 1, 2, and 3, as determined by the NRRI study which possibly overstates the true cost to AT&T if its lines are focused primarily in Zones 1 and 2. We assumed constant UNE-P prices going forward as a simplifying assumption but because our model is dynamic by state, we will be able to capture future changes.. On the revenue side, we also referred to the NRRI study to determine a state specific revenue estimate per UNE-P subscriber. We assumed AT&T currently receives a 10% premium to the NRRI calculated state-by-state revenue estimates (consistent with historical revenue rates for AT&T's local offering) and that this premium falls quarterly until the state rates are equal to the calculated rates from the NRRI study.

For the purposes of our model, we assumed what we deem to be an appropriate \$125 acquisition cost per gross add and SG&A expenses of 25% of local revenue. Our estimated quarterly churn rate (discussed earlier) rises from 4.5% in 4Q02 to 4.6% and falls back to 2.4% by 2006 in each state as customers settle down with their bundled services. We note that the model is sensitive to changes in the assumed CPGA, churn, and SG&A costs, as would be expected in a new and growing business. We expect greater clarity and detail from the company in coming months to allow us to fine tune these assumptions and closely track the performance of the local UNE-P rollout.

We estimated historical state-by-state UNE-P customer totals based on limited market share data provided by the company. The market share totals disclosed by the company are based on total state households, not access lines. To estimate the state-by-state addressable market for AT&T (defined by the company as the number of households in each state), we assumed 1.19 lines per household in 4Q02 and that this total would decline over time to 1.14 as second lines become less prevalent in the average household. We estimated the number of local customers in each state using a combination of data from the UNE-P investor day, historical press releases regarding specific states, and the recent market share data provided in the 4Q02 earnings call. Going forward, we forecast AT&T to take a 10-14% local share in the states it enters, which translates into 3.9 million customers by 4Q03, 4.5 million customers by 4Q04 and 5.2 million customers by 4Q06.

AT&T management is targeting an expansion of its UNE-P service into a total of 19-22 states in 2003, which should cover more than 75% of RBOC lines. According to AT&T, it will only enter states that can support a 45% gross margin requirement based on the spread between established UNE-P rates and existing local service retail rates. The payback period per gross customer add is 7-14 months, implying that AT&T's UNE-P breakeven and profitability strategy is highly sensitive to customer churn. While the program has seen some initial success to date, we don't perceive AT&T's UNE-P strategy as the panacea for stemming substantial revenue losses in the immediate term. Rather, we view this as a longer-term strategy intended to battle the RBOCs as a viable and survivable vertically integrated service provider and reduce churn in its own core consumer LD market. The program's aim is to target and retain high-valued customers in order to further improve the economics of its consumer division as competition heats up in anticipation of RBOC long distance entry. AT&T has achieved a mid-single digit share in each of the 8 markets in which it offers All Distance service.

We completed a state-by-state UNE-P gross margin analysis to determine which states could be targeted for UNE-P service by AT&T. With respect to new states where AT&T will expand its local service offerings, the company has to date only announced specific plans to enter the state of Massachusetts with UNE-P service, although we believe the company will take advantage of expected rate reductions from other states such as Massachusetts. The company has not specified which other states it will enter to reach its targeted 19-22 states by the end of 2003. However, the company has previously stated that it will only enter states where it can generate a 45% gross margin. Based on UNE-P rate data and average revenue per line data from the NRRI, we ranked the states where AT&T does not offer UNE-P service by gross margin in an attempt to get a better idea of which states could be next. According to this data, 25 states currently meet the 45% gross margin threshold. All 10 states (including D.C.) where AT&T offers local service via UNE-P meet the 45% UNE-P threshold, with D.C. leading the pack at 84% and Texas at the bottom at 45%.

Our gross margin analysis suggests that Wisconsin, Maryland, Kentucky, South Carolina and Tennessee could be the next states in which AT&T announces a local **UNE-P service offering.** For these potential new states we chose states that at least meet the 45% gross margin estimate. In South Carolina, we estimate a 54% gross margin and believe this could be an attractive state for AT&T since the South Carolina PUC is currently in the midst of a UNE-P rate study that could lower the rates even further. In Kentucky (50% average gross margin) and Maryland (51% average gross margin), AT&T could also see near-term rate reductions due to pending PUC rate studies. Finally, we believe Wisconsin (54% average gross margin) and Tennessee (average 55% gross margin) would also be attractive UNE-P states for AT&T due to the high gross margins. We believe AT&T could soon enter the Pennsylvania, a state that currently does not meet the 45% gross margin hurdle rate but has a pending rate study that could result in reduced UNE-P rates in the near term. AT&T may refrain from entering several states that have rates that could support 45% gross margins but have unfriendly PUCs, have a lack of zone 1 density, or have other strategic problems with respect to entry. Please see the following table for our state-by-state UNE-P rate, local revenue, and gross margin estimates.

**Projecting the remaining five states that will bring AT&T to 19-22 total states involves a great deal of uncertainty.** At this level of detail, there are numerous possibilities and little in the form of data to make a sound estimate. Nonetheless, these additional states still represent an opportunity for AT&T. To complete the model, at this time, we have chosen to add in the next five highest states with that represent the best economic opportunity for AT&T with respect to average gross margins.

Please see our full UNE-P model located in Appendix I. We estimate the capex required to migrate local customers to a facilities based network to be \$364 million in 2004 and \$400 million in 2005 which is in our current AT&T model. Since the FCC's Final Order is still not public, it is still relatively early in the local business model to get a true sense for the costs AT&T will need to incur to switch its local UNE-P customers to a facilities based network. In fact, to date it is still not clear how quickly AT&T will need to complete this migration or when it will begin. Nonetheless, we estimated the capital requirements assuming that AT&T transfers 40% of its base in 2004 and another 40% of its base in 2005 for a total of 80% base migration. We assumed that the company could put two users per port on its network, with a \$200 cost per port and a \$200 labor cost per user to migrate to the network. We also assume local maintenance capex of roughly \$100 million per annum (5% of local revenue). We estimate AT&T will dilute its FCF by \$270 million in 2004, \$259 million in 2005, at which time the company will generate positive FCF from its local operations totaling \$38 million in 2006, \$80 million in 2007, and \$89 million in 2008.

# AT&T Local Capex and Free Cash Flow Estimates Assume 80% UNE-P to UNE-L Migration

(\$ millions,	except	per	port	and	labor	costs)
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(\$ minoria, axaapt par part and labor costs)	2002E	2003E	2004E	2005E	2006E	2007E	2008E	2009E	2010E	2011E	2012E
Local EBITDA	(85)	34	156	235	324	367	382	399	405	422	429
(tax affected Local EBITDA)	(51)	20	93	141	195	220	229	239	243	253	257
Migration capex			Base subs	cribers			Increme	ntal subse	cribers		
Users per port		_	2	2	2	2	2	2	2	2	2
Cost per port			\$200	\$200	\$200	\$200	\$200	\$200	\$200	\$200	\$200
Labor cost to switch			\$200	\$200	\$200	\$200	\$200	\$200	\$200	\$200	\$200
Capex at migration rate of X%											
10%											
20%											
30%			\$273	\$300							
40%			\$364	\$400							
50%			\$455	\$500							
60%											
70%											
80%					\$54	\$36	\$33	\$24	\$28	<b>\$</b> 15	\$7
90%					\$61	\$40	\$37	\$27	\$32	\$16	\$8
100%					\$68	\$45	\$41	\$30	\$35	\$18	\$9
Assumed switch migration capex			\$364	\$400	\$61	\$40	\$37	\$27	\$32	\$16	\$8
Local maintenance capex					95	100	103	106	108	110	111
Estimated Local FCF	(55)	22	(270)	(259)	38	80	89	106	103	127	138
Source: Company reports, Banc of America Sec	urities LLC es	timates.									

# State-By-State UNE-P Gross Margin Analysis Based on January 1, 2003 Data (\$ Monthly rates)

	Density Weighted Average Monthly UNE-P rate	Average Monthly Revenue	Average Gross
State	(w/transport)	Per Line	Margin
Current AT&T UNE-P States			
DC	\$5.72	\$36.57	84%
Illinois	12.51	36.56	66%
Indiana	11.99	33.06	64%
Georgia	16.86	43.72	61%
New York	16.61	38.84	57%
Ohio	15.56	33.85	54%
Michigan	14.51	30.88	53%
California	13.07	26.76	51%
New Jersey	13.38	26.09	49%
Texas	20.09	36.65	45%
Massachusetts	22.62	31.98	29%
Potential New States			
Wisconsin	15.32	33.53	54%
South Carolina	19.26	41.97	54%
Florida	16.46	34.58	52%
Kentucky	20.55	41.17	50%
Tennessee	17.98	39.73	55%
Louisiana	19.95	43.87	55%
Nebraska	19.57	41.51	53%
Alabama	20.59	42.67	52%
Mississippi	25.25	51.50	51%
Maryland	16.62	33.94	51%
Remaining States			
Colorado	21.12	42.64	50%
Arkansas	17.51	34.86	50%
Utah	18.11	35.41	49%
North Carolina	19.10	37.28	49%
Kansas	18.72	33.85	45%
Virginia	18.98	34.07	44%
North Dakota	20.83	37.32	44%
Washington	18.37	32.30	43%
Arizona	19.45	34.06	43%
Vermont	20.99	36.70	43%
Delaware	16.99	28.89	41%
Missouri	21.10	34.51	39%
Rhode Island	19.53	31.05	37%
West Virginia	25.46	40.45	37%
Oklahoma	20.78	31.74	35%
Maine	20.50	30.92	34%
Pennsylvania	19.13	28.55	33%
Wyoming	28.75	42.54	32%
Minnesota	23.58	33.30	29%
New Hampshire	21.77	30.63	29%
Idaho	24.69	34.29	28%
New Mexico	23.88	32.90	27%
lowa	20.45	26.71	23%
Connecticut	24.94	32.04	22%
Oregon	19.32	24.20	20%
Montana	28.67	35.13	18%
South Dakota	29.54	33.51	12%
Journ Barrota	32.05	29.31	-9%

Appendix I: UNE-P Model

# AT&T UNE-P State by State Model Example Texas and Michigan

_	2001	2002E	2003E	2004E	2005E
Texas					
UNE-P Subscribers (Beginning)	85,448	367,996	471,051	539,697	589,600
Gross Adds	160,708	427,223	378,144	324,996	287,637
note: p/p change		165.8%	-11.5%	-14.1%	-11.5%
Churn	19,767	188,568	256,559	275,659	240,039
Net Adds	140,940	238,655	121,585	49,337	47,598
UNE-P Subscribers (Ending)	140,940	379,595	501,180	550,518	598,115
Average UNE-P Subscribers	70,470	260,268	440,388	525,849	574,316
Total households	5,638	5,462	5,332	5,243	5,156
note: p/p change	nm	-3.1%	-2.4%	-1.7%	-1.7%
Penetration	2.5%	7.0%	9.4%	10.5%	11.6%
Revenue per sub (monthly)	\$40.32	\$40.32	\$39.32	\$37.77	\$36.55
Total revenue opportunity	2,727	2,642	2,516	2,376	2,262
AT&T revenue	19	163	210	239	252
- UNE-P cost per line	\$20.09	\$20.09	\$20.09	\$20.09	\$20.09
= AT&T gross margin	9	82	103	112	114
note: % of revenue	50.2%	50.2%	48.9%	46.8%	45.0%
- Cost per gross add	10	13	12	10	9
- SG&A	5	41	52	60	63
= AT&T UNE-P EBITDA	(15)	(12)	3	11	15
note: % of revenue	-81.4%	-7.6%	1.3%	4.8%	5.8%
Michigan					
UNE-P Subscribers (Beginning)		205,448	290,823	319,252	334,651
Gross Adds		311,927	227,125	185,947	154,942
Note: p/p change		nm	-27.2%	-18.1%	-16.7%
Churn		82,287	156,901	163,738	137,754
Net Adds		229,640	70,224	22,210	17,188
UNE-P Subscribers (Ending)		229,640	299,864	322,074	339,262
Average UNE-P Subscribers		114,820	264,752	310,969	330,668
Total households		2,982	2,911	2,863	2,815
Note: p/p change		nm	-2.4%	-1.7%	-1.7%
Penetration		7.7%	10.3%	11.3%	12.1%
Revenue per sub (monthly)		\$33.97	\$33.13	\$31.82	\$30.80
Total revenue opportunity		1,216	1,157	1,093	1,041
AT&T revenue		57	107	120	122
- UNE-P cost per line		\$15.16	\$14.51	\$14.51	\$14.51
= AT&T gross margin		32	60	65	65
Note: % of revenue		55.7%	56.2%	54.4%	52.9%
- Cost per gross add		10	7	6	5
- SG&A		14	27	30	31
= AT&T UNE-P EBITDA		(21)	5	12	15
Note: % of revenue		-37.5%	4.6%	10.0%	12.0%
Source: Company reports, Banc of America Securities LLC estimates.					

AT&T state-by-state UNE-P Model Summary Tables UNE-P Penetration Rates and Subscriber % by State

	2001	2002E	2003E	2004E	2005E
Penetration Rate Summary					
Texas	2.5%	7.0%	9.4%	10.5%	11.6%
Michigan		7.7%	10.3%	11.3%	12.1%
Illinois		4.7%	8.0%	10.4%	11.2%
Indiana			4.2%	6.3%	8.3%
Ohio		5.5%	8.7%	10.0%	11.0%
California		4.3%	8.1%	9.9%	11.5%
Georgia		4.0%	6.0%	7.1%	8.2%
New York	8.0%	13.3%	14.7%	14.9%	15.3%
New Jersey		4.5%	8.3%	8.7%	9.5%
Washington D.C.			3.7%	5.7%	7.7%
Massachusetts			3.7%	4.9%	5.8%
Wisconsin (BAS estimated target)			3.7%	4.9%	5.8%
South Carolina (BAS estimated target)			2.5%	4.6%	5.6%
Florida (BAS estimated target)			2.5%	4.6%	5.6%
Kentucky (BAS estimated target)			2.5%	4.6%	5.6%
Tennessee (BAS estimated target)			2.5%	4.6%	5.6%
Louisiana (BAS estimated target)			2.5%	4.6%	5.6%
Nebraska (BAS estimated target)			2.5%	4.6%	5.6%
Alabama (BAS estimated target)			2.5%	4.6%	5.6%
Mississippi (BAS estimated target)			2.5%	4.6%	5.6%
Maryland (BAS estimated target)			3.7%	4.9%	5.8%
% Subs by state					
Texas	22%	16%	13%	12%	12%
Michigan	0%	9%	8%	7%	7%
Illinois	0%	7%	8%	8%	8%
Indiana	0%	0%	1%	2%	2%
Ohio	0%	5%	5%	5%	5%
California	0%	18%	20%	21%	22%
Georgia	0%	4%	3%	3%	4%
New York	78%	34%	23%	19%	18%
New Jersey	0%	7%	7%	6%	6%
Washington D.C.	0%	0%	0%	0%	0%
Massachusetts	0%	0%	2%	2%	2%
Wisconsin (BAS estimated target)	0%	0%	1%	1%	1%
South Carolina (BAS estimated target)	0%	0%	1%	1%	1%
Florida (BAS estimated target)	0%	0%	2%	4%	4%
Kentucky (BAS estimated target)	0%	0%	0%	1%	1%
Tennessee (BAS estimated target)	0%	0%	1%	2%	2%
Louisiana (BAS estimated target)	0%	0%	1%	1%	1%
Nebraska (BAS estimated target)	0%	0%	0%	0%	0%
Alabama (BAS estimated target)	0%	0%	1%	1%	1%
Mississippi (BAS estimated target)	0%	0%	0%	1%	1%
Maryland (BAS estimated target)	0%	0%	2%	2%	2%
Total	100%	100%	100%	100%	100%
Source: ECC Data, NRRI Data, and Banc of America Securities III	Costimatos				

AT&T state-by-state UNE-P Model Summary Tables UNE-P Net Subscriber Adds and Total Subscribers

_	2001	2002E	2003E	2004E	2005E
Net Add Summary					
Texas	140,940	238,655	121,585	49.337	47,598
Michigan	0	229,640	70,224	22,210	17,188
Illinois	0	176,805	120,130	82,660	22,427
Indiana	0	0	52,987	25,172	23,106
Ohio	0	125,283	68,171	25,208	17,881
California	0	430,415	361,054	159,792	135,433
Georgia	0	89,318	41,955	21,979	23,656
New York	512,972	322,089	60,242	(13,814)	6,027
New Jersey	0	159,023	125,496	6,144	20,516
Washington D.C.	0	0	8,525	4,275	4,153
Massachusetts	0	0	77,540	22,760	16,220
Wisconsin (BAS estimated target)	0	0	41,511	12,666	8,954
South Carolina (BAS estimated target)	0	0	21,031	16,458	7,583
Florida (BAS estimated target)	0	0	91,556	72,754	34,086
Kentucky (BAS estimated target)	0	0	17,251	13,470	6,191
Tennessee (BAS estimated target)	0	0	38,855	30,325	13,932
Louisiana (BAS estimated target)	0	0	32,564	25,496	11,754
Nebraska (BAS estimated target)	0	0	9,677	7,968	3,788
Alabama (BAS estimated target)	0	0	27,299	21,103	9,589
Mississippi (BAS estimated target)	0	0	18,855	14,856	6,896
Maryland (BAS estimated target)	0	0	72,670	21,330	15,201
Total	653,913	1,771,227	1,479,179	642,148	452,180
Total Subscriber Summary					
Texas	140,940	379,595	501,180	550,518	598,115
Michigan	0	229,640	299,864	322,074	339,262
Illinois	0	176,805	296,935	379,595	402,022
Indiana	0	0	52,987	78,159	101,265
Ohio	0	125,283	193,454	218,662	236,544
California	0	430,415	791,469	951,261	1,086,694
Georgia	0	89,318	131,273	153,252	176,908
New York	512,972	835,061	895,303	881,489	887,516
New Jersey	0	159,023	284,519	290,663	311,179
Washington D.C.	0	0	8,525	12,800	16,953
Massachusetts	0	0	77,540	100,300	116,520
Wisconsin (BAS estimated target)	0	0	41,511	54,177	63,131
South Carolina (BAS estimated target)	0	0	21,031	37,489	45,072
Florida (BAS estimated target)	0	0	91,556	164,310	198,396
Kentucky (BAS estimated target)	0	0	17,251	30,721	36,912
Tennessee (BAS estimated target)	0	0	38,855	69,180	83,113
Louisiana (BAS estimated target)	0	0	32,564	58,060	69,814
Nebraska (BAS estimated target)	0	0	9,677	17,644	21,432
Alabama (BAS estimated target)	0	0	27,299	48,402	57,991
Mississippi (BAS estimated target)	0	0	18,855	33,711	40,607
Maryland (BAS estimated target)	0	0	72,670	94,000	109,201
Total	653,913	2,425,140	3,904,319	4,546,467	4,998,648

AT&T state-by-state UNE-P Model Summary Tables
UNE-P Revenue Per Access Line and Weighted Average Revenue Per User

(\$ Monthly rates)

2001	2002E	2003E	2004E	2005E
\$40.32	\$40.32	\$39.32	\$37.77	\$36.55
	\$33.97	\$33.13	\$31.82	\$30.80
	\$40.22	\$39.22	\$37.68	\$36.46
		\$35.47	\$34.07	\$32.97
	\$37.24	\$36.31	\$34.88	\$33.76
	\$29.44	\$28.71	\$27.58	\$26.69
	\$48.09	\$45.74	\$43.47	\$43.47
\$42.72	\$42.72	\$40.63	\$38.62	\$38.62
	\$28.70	\$27.29	\$25.94	\$25.94
		\$38.26	\$36.36	\$36.36
		\$33.45	\$31.80	\$31.80
		\$35.08	\$33.34	\$33.34
		\$43.90	\$41.73	\$41.73
		\$36.17	\$34.38	\$34.38
		\$43.07	\$40.94	\$40.94
				\$39.50
				\$43.62
				\$41.27
				\$42.43
				\$51.21
		\$35.50	\$33.75	\$33.75
8.69		5.05	4.57	4.37
•				2.09
•				2.93
-				0.67
-				1.60
-				5.80
				1.54
33.52				6.86
=				1.61
-	-			0.12
-	-			0.74
•	-			0.42
-	-		0.34	0.38
-	-	0.85	1.24	1.36
-	-	0.19	0.28	0.30
-	-	0.41	0.60	0.66
-	-	0.38	0.56	0.61
-	-	0.11	0.16	0.18
-	-	0.31	0.45	0.49
-	-	0.26	0.38	0.42
_	_			0.74
42.20	37.97	36.05	34.53	33.89
	\$40.32 \$42.72 \$42.72	\$40.32 \$40.32 \$33.97 \$40.22 \$37.24 \$29.44 \$48.09 \$42.72 \$42.72 \$28.70 \$28.70 \$37.24 \$29.44 \$48.09 \$42.72 \$28.70	\$40.32 \$40.32 \$39.32 \$33.13 \$40.22 \$39.22 \$35.47 \$35.47 \$37.24 \$36.31 \$29.44 \$28.71 \$48.09 \$45.74 \$42.72 \$42.72 \$40.63 \$28.70 \$27.29 \$38.26 \$33.45 \$35.08 \$43.90 \$36.17 \$43.07 \$41.56 \$45.89 \$43.42 \$44.64 \$53.87 \$35.50 \$\$8.69 \$6.31 \$5.05 \$6.20 \$6.20 \$6.66 \$6.20 \$6.20 \$6.66 \$6.20 \$6.20 \$6.66 \$6.20 \$6.20 \$6.20 \$6.66 \$6.20 \$6.2	\$40.32 \$40.32 \$39.32 \$37.77 \$33.97 \$33.13 \$31.82 \$40.22 \$39.22 \$37.68 \$35.47 \$34.07 \$37.24 \$36.31 \$34.88 \$29.44 \$28.71 \$27.58 \$48.09 \$45.74 \$43.47 \$42.72 \$40.63 \$33.45 \$31.80 \$35.08 \$33.45 \$31.80 \$35.08 \$33.45 \$31.80 \$35.08 \$33.34 \$43.07 \$40.94 \$41.56 \$39.50 \$44.73 \$35.50 \$33.75 \$42.72 \$42.72 \$44.64 \$42.43 \$53.87 \$51.21 \$35.50 \$33.75 \$45.89 \$43.62 \$44.64 \$42.43 \$53.87 \$51.21 \$35.50 \$33.75 \$45.89 \$43.62 \$43.42 \$41.27 \$44.64 \$42.43 \$53.87 \$51.21 \$35.50 \$33.75 \$45.89 \$43.62 \$43.42 \$41.27 \$44.64 \$42.43 \$53.87 \$51.21 \$35.50 \$33.75 \$45.89 \$43.62 \$43.42 \$41.27 \$44.64 \$42.43 \$53.87 \$51.21 \$35.50 \$33.75 \$45.89 \$43.62 \$43.42 \$41.27 \$44.64 \$42.43 \$53.87 \$51.21 \$35.50 \$33.75 \$45.89 \$43.62 \$43.42 \$41.27 \$44.64 \$42.43 \$53.87 \$51.21 \$35.50 \$33.75 \$45.89 \$43.62 \$43.42 \$41.27 \$44.64 \$42.43 \$44.64 \$4

# AT&T state-by-state UNE-P Model Summary Tables UNE-P Cost and Gross Margin Per Subscriber

(\$ Monthly rates)

_	2001	2002E	2003E	2004E	2005E
Total UNE-P rate Summary					_
Texas	\$20.09	\$20.09	\$20.09	\$20.09	\$20.09
Michigan	,	\$15.16	\$14.51	\$14.51	\$14.51
Illinois		\$14.73	\$12.51	\$12.51	\$12.51
Indiana		<b>*</b>	\$11.99	\$11.99	\$11.99
Ohio		\$15.56	\$15.56	\$15.56	\$15.56
California		\$13.07	\$13.07	\$13.07	\$13.07
Georgia		\$19.54	\$16.86	\$16.86	\$16.86
New York	\$16.61	\$16.61	\$16.61	\$16.61	\$16.61
New Jersey	<b>\$10.01</b>	\$13.58	\$13.38	\$13.38	\$13.38
Washington D.C.		<b>\$</b> 10.00	\$5.72	\$5.72	\$5.72
Massachusetts			\$18.41	\$17.00	\$17.00
Wisconsin (BAS estimated target)			\$15.32	\$15.32	\$15.32
South Carolina (BAS estimated target)			\$19.26	\$19.26	\$19.26
Florida (BAS estimated target)			\$16.46	\$16.46	\$16.46
Kentucky (BAS estimated target)			\$20.55	\$20.55	\$20.55
Tennessee (BAS estimated target)			\$17.98	\$17.98	\$17.98
Louisiana (BAS estimated target)			\$19.95	\$19.95	\$19.95
Nebraska (BAS estimated target)			\$19.57	\$19.57	\$19.57
Alabama (BAS estimated target)			\$20.59	\$20.59	\$20.59
Mississippi (BAS estimated target)			\$25.25	\$25.25	\$25.25
Maryland (BAS estimated target)			\$16.62	\$16.62	\$16.62
Average	\$18.35	\$16.04	\$16.68	\$16.61	\$16.61
Average	ψ10.55	\$10.04	\$10.00	\$10.01	φ10.01
Total Gross Margin Summary (per sub)					
Texas	\$20.23	\$20.23	\$19.23	\$17.68	\$16.46
Michigan		\$18.81	\$18.62	\$17.31	\$16.29
Illinois		\$25.49	\$26.71	\$25.17	\$23.95
Indiana			\$23.48	\$22.08	\$20.98
Ohio		\$21.68	\$20.75	\$19.32	\$18.20
California		\$16.37	\$15.64	\$14.51	\$13.62
Georgia		\$28.55	\$28.88	\$26.61	\$26.61
New York	\$26.11	\$26.11	\$24.02	\$22.01	\$22.01
New Jersey		\$15.12	\$13.91	\$12.56	\$12.56
Washington D.C.			\$32.54	\$30.64	\$30.64
Massachusetts			\$15.05	\$14.80	\$14.80
Wisconsin (BAS estimated target)			\$19.76	\$18.02	\$18.02
South Carolina (BAS estimated target)			\$24.64	\$22.47	\$22.47
,			\$19.71	\$17.92	\$17.92
Florida (BAS estimated target)					
Kentucky (BAS estimated target)			\$22.52	\$20.39	\$20.39
Tennessee (BAS estimated target)			\$23.58	\$21.52	\$21.52
Louisiana (BAS estimated target)			\$25.94	\$23.67	\$23.67
Nebraska (BAS estimated target)			\$23.85	\$21.70	\$21.70
Alabama (BAS estimated target)			\$24.05	\$21.84	\$21.84
Mississippi (BAS estimated target)			\$28.62	\$25.96	\$25.96
Maryland (BAS estimated target)			\$18.88	\$17.13	\$17.13
Weighted average	\$23.17	\$21.54	\$22.40	\$20.63	\$20.32
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AT&T state-by-state UNE-P Model Summary Tables Total AT&T UNE-P Revenue and EBITDA

(\$ millions)

(\$ illillois)	2001	2002E	2003E	2004E	2005E
Total Revenue Summary					
Texas	19	163	210	239	252
Michigan	0	57	107	120	122
Illinois	0	30	115	154	171
Indiana	0	0	9	27	35
Ohio	0	16	71	87	93
California	0	56	223	284	330
Georgia	0	16	63	74	86
New York	58	399	428	412	410
New Jersey	0	10	74	90	93
Washington D.C.	0	0	2	5	6
Massachusetts	0	0	13	34	42
Wisconsin (BAS estimated target)	0	0	7	19	24
South Carolina (BAS estimated target)	0	0	3	16	21
Florida (BAS estimated target)	0	0	12	58	76
Kentucky (BAS estimated target)	0	0	3	13	17
Tennessee (BAS estimated target)	0	0	6	28	36
Louisiana (BAS estimated target)	0	0	5	26	34
Nebraska (BAS estimated target)	0	0	2	7	10
Alabama (BAS estimated target)	0	0	4	21	27
Mississippi (BAS estimated target)	0	0	4	18	23
Maryland (BAS estimated target)	0	0	13	34	41
Total	77	747	1,373	1,765	1,949
Total EBITDA Summary	(15)	(10)			
Texas	(15)	(12)	2	11	15
Michigan	0	(21)	5	12	15
Illinois	0	(14)	16	31	46
Indiana	0	0	(5)	3	6
Ohio	0	(12)	2	9	13
California	0	(48)	(28)	1	15
Georgia	0 (40)	(7)	10	15	20
New York	(49)	48	73	74	84
New Jersey	0	(18)	(14)	1	4
Washington D.C.	0	0	(0)	2	3 1
Massachusetts Wissanain (RAS setimated target)	0	0	(9)	(2)	3
Wisconsin (BAS estimated target)	0	0	(4)	1	3
South Carolina (BAS estimated target)	0	0	(2)	(3)	7
Florida (BAS estimated target)	0	0	(10) (2)		2
Kentucky (BAS estimated target) Tennessee (BAS estimated target)	0	0	(4)	(0) 1	5
	0	0		1	5
Louisiana (BAS estimated target) Nebraska (BAS estimated target)	0	0	(3) (1)	0	ე 1
, ,	0	0		0	3
Alabama (BAS estimated target)	0	0	(3)	1	3
Mississippi (BAS estimated target) Maryland (BAS estimated target)	0	0	(2) (8)	0	3
Total	(64)	(85)	(6) <b>13</b>	159	256
Course FOO Data NRRI Data and Bana of America Conscition III	(04)	(03)	13	133	230

AT&T state-by-state UNE-P Model Summary Tables UNE-P Gross Margin and EBITDA Summary

_	2001	2002E	2003E	2004E	2005E
Total Gross Margin Summary (%)					
Texas	50%	50%	49%	47%	45%
Michigan		55%	56%	54%	53%
Illinois		63%	68%	67%	66%
Indiana			66%	65%	64%
Ohio		58%	57%	55%	54%
California		56%	54%	53%	51%
Georgia		59%	63%	61%	61%
New York	61%	61%	59%	57%	57%
New Jersey		53%	51%	48%	48%
Washington D.C.			85%	84%	84%
Massachusetts			45%	47%	47%
Wisconsin (BAS estimated target)			56%	54%	54%
South Carolina (BAS estimated target)			56%	54%	54%
Florida (BAS estimated target)			54%	52%	52%
Kentucky (BAS estimated target)			52%	50%	50%
Tennessee (BAS estimated target)			57%	54%	54%
Louisiana (BAS estimated target)			57%	54%	54%
Nebraska (BAS estimated target)			55%	53%	53%
Alabama (BAS estimated target)			54%	51%	51%
Mississippi (BAS estimated target)			53%	51%	51%
Maryland (BAS estimated target)			53%	51%	51%
Total	56%	57%	57%	55%	55%
Total EBITDA Margin Summary (%)					
Texas	-81%	-8%	1%	4%	6%
Michigan		-37%	4%	10%	12%
Illinois		-47%	14%	20%	27%
Indiana			-51%	12%	17%
Ohio		-76%	3%	11%	14%
California		-84%	-13%	1%	5%
Georgia		-45%	16%	20%	23%
New York	-85%	12%	17%	18%	21%
New Jersey		-185%	-19%	1%	4%
Washington D.C.				33%	39%
Massachusetts			-68%	-5%	3%
Wisconsin (BAS estimated target)			-60%	4%	11%
South Carolina (BAS estimated target)			-66%	3%	14%
Florida (BAS estimated target)			-88%	-5%	9%
Kentucky (BAS estimated target)			-71%	-2%	10%
Tennessee (BAS estimated target)			-70%	2%	14%
Louisiana (BAS estimated target)			-57%	4%	15%
Nebraska (BAS estimated target)			-68%	1%	12%
Alabama (BAS estimated target)			-66%	1%	12%
Mississippi (BAS estimated target)			-51%	4%	13%
Maryland (BAS estimated target)			-62%	1%	8%
Total	-84%	-11%	1%	9%	13%
Source: FCC Data, NRRI Data, and Banc of America Securities LLC estimates	i.				

# Appendix II: Financial Models

AT&T Corp.

Annual Income Statement

(\$ millions)

(Villinois)	2002	2003E	2004E	2005E	2006E	2007E
Business Services Revenue	26,558	25,795	25,906	26,042	26,222	26,626
Consumer Services Revenue	11,527	9,262	7,800	6,989	6,415	6,000
Broadband Revenue	0	0	0	0	0	0
Corp/Other Revenue	(258)	52	52	52	52	52
=Total reported revenue	37,827	35,109	33,758	33,083	32,688	32,678
note: y/y change	-26.8%	-7.2%	-3.8%	-2.0%	-1.2%	0.0%
-Cost of services and products	8,363	8,585	8,661	8,447	8,344	8,371
-Cost of access and other connection	10,790	10,564	10,238	10,051	9,944	9,952
= Gross profit	18,674	15,961	14,859	14,585	14,401	14,355
note: y/y change	-28.8%	-14.5%	-6.9%	-1.8%	-1.3%	-0.3%
note: % total reported revenue	49.4%	45.5%	44.0%	44.1%	44.1%	43.9%
- Selling, general and administrative	7,988	7,498	7,064	6,825	6,682	6,627
= Reported EBITDA	10,686	8,463	7,794	7,760	7,719	7,728
note: y/y change	-31.6%	-20.8%	-7.9%	-0.4%	-0.5%	0.1%
note: % total reported revenue	28.2%	24.1%	23.1%	23.5%	23.6%	23.6%
- Depreciation and Amortization	4,888	4,620	4,388	4,229	4,087	3,950
= EBIT	5,798	3,842	3,406	3,531	3,632	3,778
note: y/y change	-7.7%	-33.7%	-11.4%	3.7%	2.9%	4.0%
Interest expense	1,448	1,196	985	918	835	605
+ Other expense (income), net	1,514	(92)	(109)	(125)	(175)	(179)
Income before income taxes	2,836	2,738	2,530	2,737	2,972	3,351
- Income taxes	1,587	1,055	1,011	1,093	1,187	1,339
note: effective tax rate	56.0%	38.5%	40.0%	40.0%	40.0%	40.0%
+ Min. interests earnings rel to equity investments	(286)	(15)	4	4	4	4
= Net income before extraordinaries	963	1,668	1,523	1,648	1,789	2,017
note: y/y change +Cum eff of accting change (net of taxes)	-123.3%	73.2%	-8.7%	8.2%	8.6%	12.7%
+ Extraordinary items	(14,513)	0	0	0	0	0
+ gain on disposition of discontinued operations-net of taxes	1,324	0	0	0	0	0
= Net income	(13,082)	1,711	1,523	1,648	1,789	2,017
- Preferred interest	Ó	0	0	0	0	0
= Net income avail to common shareholders	(13,082)	1,711	1,523	1,648	1,789	2,017
note: y/y change	-237.6%	-113.1%	-11.0%	8.2%	8.6%	12.7%
Weighted average shares for diluted EPS	763	785	789	793	797	801
Diluted earnings per share - Operating	(17.50)	2.18	1.93	2.08	2.24	2.52
Basic earnings per share – Reported	(18.02)	2.18	1.93	2.08	2.24	2.52
Diluted earnings per share (normalized	4.64	2.07	1.93	2.08	2.24	2.52
Common dividend per share	0.75	0.75	0.75	0.75	0.75	0.75
Source: Company reports, Banc of America Securities LLC estimates.						

I												
	1Q 2002	2Q 2002	3Q 2002	4Q 2002	1Q 2003E	2Q 2003E	3Q 2003E	4Q 2003E	1Q 2004E	2Q 2004E	3Q 2004E	4Q 2004E
Business Services Revenue	6,528	6,742	6,700	6,588	6,437	6,449	6,449	6,460	6,466	6,472	6,480	6,489
Consumer Services Revenue	3,086	2,911	2,794	2,736	2,536	2,345	2,238	2,143	2,055	1,980	1,911	1,853
Broadband Revenue	0	0	0	0	0	0	0	0	0	0	0	0
Corp/Other Revenue	(99)	(73)	(82)	(34)	13	13	13	13	13	13	13	13
=Total reported revenue	9,548	9,580	9,409	9,290	8,986	8,807	8,700	8,616	8,534	8,465	8,404	8,355
note: p/p change	-23.9%	0.3%	-1.8%	-1.3%	-3.3%	-2.0%	-1.2%	-1.0%	-0.9%	-0.8%	-0.7%	<b>%9</b> :0-
-Cost of services and products	2,014	2,086	2,066	2,197	2,011	2,187	2,186	2,201	2,186	2,174	2,158	2,143
-Cost of access and other connection	2,788	2,747	2,679	2,576	2,698	2,637	2,620	2,609	2,586	2,567	2,550	2,536
= Gross profit	4,746	4,747	4,664	4,517	4,277	3,983	3,894	3,806	3,762	3,724	3,697	3,676
note: y/y change	-29.7%	-29.7%	-28.5%	-27.1%	-9.9%	-16.1%	-16.5%	-15.7%	-12.0%	-6.5%	-5.1%	-3.4%
note: % total reported revenue	49.7%	49.6%	49.6%	48.6%	47.6%	45.2%	44.8%	44.2%	44.1%	44.0%	44.0%	44.0%
- Selling, general and administrative	1,937	1,942	2,032	2,077	1,921	1,878	1,864	1,836	1,805	1,775	1,750	1,735
= Reported EBITDA	2,809	2,805	2,632	2,440	2,356	2,106	2,031	1,970	1,957	1,949	1,947	1,941
note: p/p change	-20.9%	-0.1%	-6.2%	-7.3%	-3.4%	-10.6%	-3.6%	-3.0%	-0.7%	-0.4%	-0.1%	-0.3%
note: % total reported revenue	29.4%	29.3%	28.0%	26.3%	26.2%	23.9%	23.3%	22.9%	22.9%	23.0%	23.2%	23.2%
- Depreciation and Amortization	1,175	1,213	1,243	1,257	1,186	1,161	1,145	1,129	1,113	1,102	1,091	1,081
= EBIT	1,634	1,592	1,389	1,183	1,170	945	988	841	843	847	856	860
note: y/y change	0.7%	-3.6%	-21.3%	-5.1%	-28.4%	-40.6%	-36.2%	-28.9%	-27.9%	-10.4%	-3.4%	2.3%
Interest expense	396	336	355	361	332	292	292	279	256	245	245	239
+ Other expense (income), net	22	20	154	1,255	(9)	(56)	(30)	(53)	(56)	(56)	(53)	(28)
Income before income taxes	1,183	1,206	880	(433)	844	619	624	591	613	628	639	650
- Income taxes	479	513	370	225	297	272	249	236	245	251	255	260
note: effective tax rate	27.8%	54.1%	42.0%	-52.0%	35.2%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%
+ Minority int + earnings rel to equity inv	(258)	(06)	15	47	(18)	_	_	<b>—</b>	_	_	_	_
= Net income before extraordinaries	446	603	525	(611)	529	408	375	356	369	378	385	391
	-192.3%	-1282.4%	-123.8%	-56.1%	18.6%	-32.3%	-28.5%	-158.2%	-30.2%	-7.5%	7.6%	6.6%
+Cum eff of accting change (net of taxes)	(826)	0	0	0	42	0	0	0	0	0	0	0
+ Extraordinary items	(292)	(13,433)	(318)	(197)	0	0	0	0	0	0	0	0
+ gain on disp of disc operations-net of taxes	0	0	0	1,324	0	0	0	0	0	0	0	0
= Net income	(675)	(12,830)	207	516	571	408	375	356	369	378	385	391
- Preferred interest	0	0	0	0	0	0	0	0	0	0	0	0
= Net inc available to common shareholders	(975)	(12,830)	207	516	571	408	375	356	369	378	385	391
note: y/y change	6864.3%	8510.7%	-98.1%	-137.1%	ши	ши	ши	ши	ши	ши	шu	шu
Weighted average shares for diluted EPS	738	750	788	9//	785	785	286	787	788	789	790	791
Diluted EPS - Operating	(1.32)	(17.11)	0.26	99.0	0.73	0.52	0.48	0.45	0.47	0.48	0.49	0.49
Basic EPS - Reported	(1.38)	(17.58)	0.27	99.0	0.73	0.52	0.48	0.45	0.47	0.48	0.49	0.49
Diluted EPS (normalized)	09.0	0.80	0.67	2.54	0.62	0.52	0.48	0.45	0.47	0.48	0.49	0.49
Common dividend per share	0 10	0,40	0		0		0	0	9	0		
_		G	۵ - ۱	0.19	S	0.19	U.18	0.19	U.19	D.18	0.19	0.19

AT&T Corp.
Annual Balance Sheet

(\$ millions)

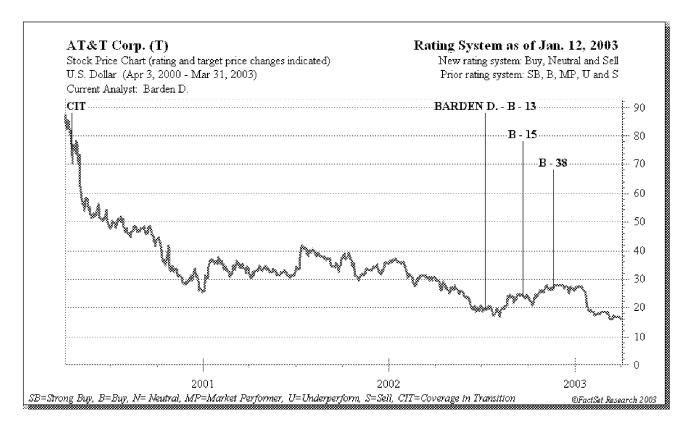
	2002	2003E	2004E	2005E	2006E
Operating cash	465	431	418	411	407
+ Accounts receivable	5,286	4,906	4,670	4,597	4,555
+ Other receivables	173	0	0	0	0
+ Investments	0	0	0	0	0
+ Deferred income taxes	910	779	779	779	779
+ Other current assets	1,520	1,150	1,150	1,150	1,150
= Total current assets	8,354	7,266	7,016	6,937	6,891
+ Accounts payable and accrueds	3,819	3,330	3,303	3,237	3,104
+ Payroll and benefit-related liabilities	1,519	941	941	941	941
+ ATTC obligation	0	0	0	0	0
+ Other S-T liabilities (excl debt)	2,924	2,921	2,832	2,788	2,763
= Total current liabilities	8,262	7,191	7,076	6,966	6,807
= Net trade working capital	92	75	(60)	(29)	84
+ PP&E, Net	25,604	24,215	23,280	22,519	21,685
+ Franchise costs, Net	0	0	0	0	0
+ Investments	0	0	0	0	0
+ Prepaid pension costs	3,596	3,655	3,655	3,655	3,655
+ Other LT Assets	5,543	5,005	5,005	5,005	5,005
+ Intangibles	4,626	4,660	4,660	4,660	4,660
+ Net assets of discontinued operations	0	0	0	0	0
= Total LT Assets	39,369	37,535	36,600	35,839	35,005
Total operating investment	39,461	37,610	36,539	35,810	35,090
+ Excess cash (reported less operating)	7,550	5,027	4,927	6,043	4,429
= Total investment	47,010	42,637	41,467	41,853	39,519
+ Deferred income taxes	4,739	4,918	5,022	5,103	5,144
+ Long-term benefit related liabilities	4,001	4,095	4,095	4,095	4,095
+ Short-term and long term debt	22,574	17,081	14,644	13,459	9,328
+ Other long-term liabilities and deferred credits	3,384	3,359	3,359	3,359	3,359
+ Convertible preferred stock	0	0	0	0	0
Minority interest	0	0	0	0	0
= LT liabilities	34,698	29,453	27,120	26,016	21,926
Stockholder's equity					
AT&T common stock	783	787	791	795	799
AT&T Wireless common stock	0	0	0	0	0
Additional capital	28,163	28,079	28,079	28,079	28,079
Retained earnings	(16,566)	(15,444)	(14,513)	(13,461)	(12,270)
Accumulated other comprehensive income	(68)	0	0	0	0
Other	0	(238)	(9)	424	986
Total stockholders equity/(deficit)	12,312	13,184	14,347	15,837	17,593
Total sources	47,010	42,637	41,467	41,853	39,519
note: total capital	55,272	49,828	48,543	48,819	46,326
note: net debt	14,560	11,623	9,298	7,005	4,491

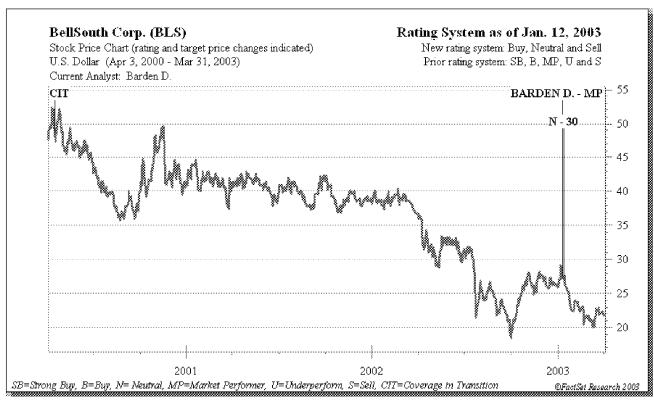
# **Banc of America Securities**

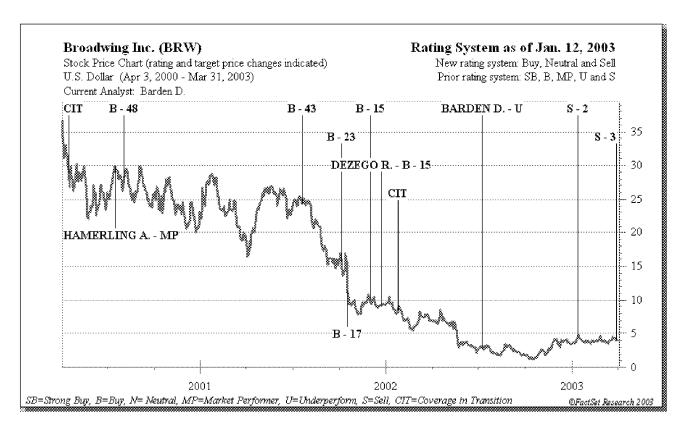
AT&T Corp. Quarterly Cash Flow Statement (\$ millions)													
•	4Q 2002	1Q 2003E	2Q 2003E	3Q 2003E	4Q 2003E	1Q 2004E	2Q 2004E	3Q 2004E	4Q 2004E	1Q 2005E	2Q 2005E	3Q 2005E	4Q 2005E
Net Income	516	571	408	375	356	369	378	385	391	400	408	416	424
Depreciation+Amortization	1,257	1,186	1,161	1,145	1,129	1,113	1,102	1,091	1,081	1,071	1,061	1,053	1,044
Net equity losses from LMG	0	0	0	0	0	0	0	0	0	0	0	0	0
Change in net working capital	(217)	26	37	(38)	(38)	171	(13)	(14)	(6)	(8)	(8)	(8)	(8)
Cash generated from operations	2,669	1,811	1,735	1,611	1,575	1,751	1,555	1,541	1,536	1,592	1,591	1,590	1,591
Capital expenditures	(1,346)	(662)	(810)	(800)	(793)	(872)	(865)	(860)	(855)	(865)	(866)	(898)	(889)
Other Changes	0	0	0	0	0	0	0	0	0	0	0	0	0
- Cash utilized	(1,346)	(662)	(810)	(800)	(793)	(872)	(865)	(860)	(855)	(865)	(866)	(898)	(869)
= Free cash flow	1,323	1,149	925	811	783	879	689	681	681	727	724	723	722
- Common dividends	(147)	(147)	(147)	(147)	(148)	(148)	(148)	(148)	(148)	(149)	(149)	(149)	(149)
= Net internal surplus / (deficit)	1,176	1,002	778	664	635	731	541	533	532	578	9/9	574	573
Repayment of debt	0	(4,019)	0	0	(1,500)	(1,250)	(14)	0	(1,174)	0	(528)	0	(926)
Issuance of debt	0	0	0	0	0	0	0	0	0	0	0	0	0
Repurchase of equity (treasury stock)	0	0	0	0	0	0	0	0	0	0	0	0	0
Issuance of equity	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	(4,476)	(67)	0	0	0	0	0	0	0	0	0	0	0
Net cash from announced financing	(4,476)	(4,116)	0	0	(1,500)	(1,250)	(14)	0	(1,174)	0	(229)	0	(956)
Incremental outside finance (repayment)	0	0	0	0	0	0	0	0	0	0	0	0	0
= Net change in cash	(3,300)	(3,114)	778	664	(865)	(518)	528	533	(642)	278	347	574	(383)

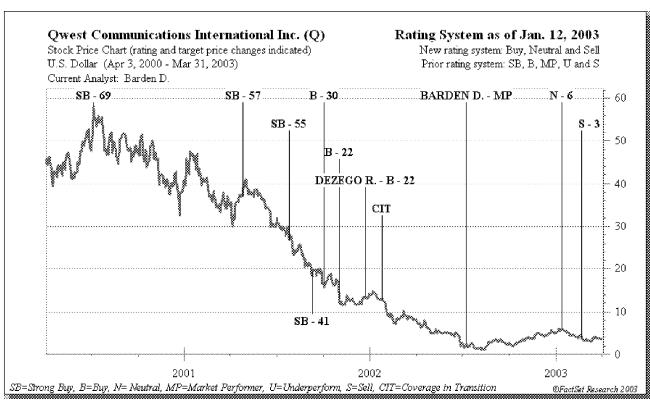
AT&T Corp.
Annual Cash Flow Statement
(\$ millions)

<u>-</u>	2002	2003E	2004E	2005E	2006E
Net Income	(13,082)	1,711	1,523	1,648	1,789
Deduct discontinued operations	(1,236)	0	0	0	0
Depreciation+Amortization	4,888	4,620	4,388	4,229	4,087
Provision for uncollectible receivables	1,058	400	200	200	155
Non-cash other	1,229	(6)	0	0	0
Deferred taxes	2,631	179	104	81	41
Cumulative effect of accounting changes (net)	856	42	0	0	0
Net equity losses from LMG	0	0	0	0	0
Net losses related to other equity inv.	512	0	0	0	0
Cost method investment impairment charges	0	0	0	0	0
Net revaluation of certain financial instruments	0	0	0	0	0
Minority interest and dividends on subsidiary preferred stock	300	29	(4)	(4)	(4)
Change in net working capital	(868)	17	135	(31)	(113)
Other	14,384	(259)	36	242	414
Cash generated from operations	10,672	6,733	6,382	6,364	6,368
Capital expenditures	(3,904)	(3,065)	(3,453)	(3,468)	(3,253)
Investments	0	0	0	0	0
Other Changes	(329)	0	0	0	0
- Cash utilized	(4,233)	(3,065)	(3,453)	(3,468)	(3,253)
= Free cash flow	6,439	3,668	2,930	2,896	3,115
- Common dividends	(549)	(589)	(592)	(595)	(598)
= Net internal surplus / (deficit)	5,890	3,078	2,338	2,300	2,517
Repayment of debt	(8,796)	(5,519)	(2,437)	(1,185)	(4,131)
Issuance of debt	405	0	0	Ó	0
Repurchase of equity (treasury stock)	(29)	0	0	0	0
Issuance of equity	2,594	0	0	0	0
Other	(2,642)	(97)	0	0	0
Net cash from announced financing	(8,468)	(5,616)	(2,437)	(1,185)	(4,131)
Incremental outside finance (repayment)	0	Ô	Ô	Ô	0
= Net change in cash	(2,578)	(2,538)	(100)	1,116	(1,614)









## **REG AC - ANALYST CERTIFICATION**

The research analyst whose name appears on the front page of this research report certifies that: (1) all of the views expressed in this research report accurately reflect his or her personal views about any and all of the subject securities or issuers; and (2) no part of the research analyst's compensation was, is, or will be directly or indirectly related to the specific recommendations or views expressed by the research analyst in this research report.

# IMPORTANT DISCLOSURES

Target Price, Valuation Method, Risk Factors

Target Price: \$24.00

**Valuation Method Used To** Sum of the Parts, Discounted Cash Flow and Comparable Multiples **Reach Target Price:** 

#### **Risk Factors:**

- 1. Declining revenues and revenue growth due to weakened economic environment, market share loss, pricing erosion, technology substitution and the eventual commoditization of long distance voice.
- 2. Bell entry into long distance is accelerating, threatening AT&T s market share in its core switched voice long distance market.

## **Banc of America Securities LLC Stock Rating System**

The rating system is based on a stock's forward-12-month expected total return (price appreciation plus dividend yield).

Volat	tility		Ratings	
		<u>Buy</u>	<u>Neutral</u>	<u>Sell</u>
Low	0-35%	10%+	9%-(6)%	(7)% or worse
Medium	36-50%	15%+	14%-(10)%	(11)% or worse
High	51-80%	25%+	24%-(15)%	(16)% or worse
Extreme	81%+	50%+	49%-(25)%	(26)% or worse
Source on vola	ntility: Bloomberg			

## **Rating Distribution**

#### **US** Coverage

Coverage Universe	Companies	Percent	<b>Investment Banking Clients</b>	Companies	Percent*
Buy	239	43	Buy	203	85
Hold	288	51	Hold	246	85
Sell	34	6	Sell	27	79

#### Media/Telecom Services

### Sector

Coverage Universe	Companies	Percent	<b>Investment Banking Clients</b>	Companies	Percent*
Buy	8	53	Buy	7	88
Hold	5	33	Hold	5	100
Sell	2	13	Sell	2	100

<sup>\*</sup> Percentage of companies in each rating group that are investment banking clients. As of 04/04/2003.

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AT&T's Responses to BellSouth's First Set of Interrogatories KPSC Docket No.2003-00379 12/15/2003 Attachment No. 46

# ATTACHMENT TO INTERROGATORY NO. 46

## Marketing and Sales-Related Expenses

- 30. Marketing and sales related expenses include all costs associated with attracting customers and providing support to sales activities. These expenses typically include the costs of locating customers, persuading them to buy, studying and pricing contracts, participating in contract negotiations, storing goods and delivering goods to the customer and handling customer inquiries about orders. Marketing and sales related expenses do not include the costs of rendering and processing customer bills and collecting payments these are considered to be primarily accounting and treasury functions and are therefore charged to general and administrative expense.
- 31. The following major functions should be included in marketing and sales-related expense:

## **Marketing and Product Management**

- 32. Marketing and Product Management includes the following activities:
  - Market research on demographics, future social trends and other factors that might affect future customer needs and buying preferences, forecasting, and identification of targets for products and services
  - Planning for development and introduction of new services
  - Development of pricing strategies and contract terms

## **Advertising Expense**

- 33. Advertising expenses are all costs incurred to promote the sale of AT&T services/products, provide general information, so as to create or stimulate a favorable public image or create or stimulate a desire to buy AT&T products or services. Accounting for advertising expense is governed by the Accounting Standards Executive Committee Statement of Position (SOP) 93-7, Reporting on Advertising Costs, and AT&T policy PO 93-05-003, AL 10-5, Cost Recognition and Reporting. AT&T's policy states, "Because of the uncertainty and difficulty in reliably measuring future benefits, virtually all advertising costs should be expensed as incurred." Since SOP 93-7 requires separate financial statement disclosure of advertising costs, special care should be taken to ensure consistent and accurate use of the advertising expense account.
- 34. Advertising expenses include all costs of creating, producing and implementing advertising including agency fees. Advertising expense should include the following:
  - Service specific advertising activities
  - Non-service specific advertising such as support of sports events, sponsorship of other public events and campaigns
  - Television and radio advertising

# Marketing and Sales-Related Expenses (continued)

## Advertising Expense (continued)

- Direct-mail, newspaper, and other print advertising
- Company and product catalogues
- · Billboard advertisements
- 35. Advertising expenses DO NOT include free minutes and other discounts (contra revenue).

## **Promotions and Offer Costs**

- 36. Promotions and offer costs include expenses for promotional activities such as exhibits/displays at trade fairs, gifts given to present and prospective customers, inducements to customers for unrelated products/services that are not part of the normal offerings of the selling business unit, incentives to acquire/retain customers (loyalty programs), and the offer costs of issuing checks
- 37. Promotional expenses and offer costs DO NOT include free minutes and other discounts (contra revenue).

## Sales and Sales Support

- 38. Includes the expenses of employees who directly interface with customers and sell AT&T products and services or support customer sales. Includes items such as:
  - Expenses of locating customers and soliciting sales
  - Technical support expenses relating to specific contracts, e.g., analysis of specifications engineering for specific product applications, responding to potential customer inquiries, etc.
  - Pricing of specific orders
  - Commissions paid to non-AT&T sales agents for selling to AT&T customers
  - Preparation and signing of customer contracts
  - · Clerical support to sales force
  - Sales support systems
- 39. Examples of types of costs to be included in marketing and sales-related (M&S) expenses are salaries, salesperson commissions, wages, employee expenses, including allocated portions of employee benefit expense, contracted services, occupancy charges such as rent, utilities and house service, material and supplies and allocated portions of support services such as clerical and secretarial work, printing and reproduction.

### Marketing and Sales-Related Expenses (continued)

### **Customer Care**

- 40. Includes costs associated with managing and administering customer accounts. Customer Care includes the following functions and activities:
  - Handling customer account inquiries via telephone or correspondence including handling of disputes, account changes (name/address), processing adjustments, and quoting rates and prices.
  - Entering and processing service orders and handling order inquiries.
  - New customer acquisition costs such as when a customer representative engages in "bridge to sales" activities
  - Planning, training and project management functions performed by Customer Care organizations

### **General and Administrative Expenses**

- 41. This item includes those costs of an overall corporate nature, such as billing, executive policy development, legal, regulatory, or financial expenses, that are incurred primarily to benefit and support the enterprise as a whole and which cannot be assigned to other major categories of business cost and expense. Major components of G&A expenses are:
  - Customer account management billing operations, This category includes bill rendering, customer payment processing, credit and collections, and bill printing and mailing costs.
  - Contracted billing services The amounts paid to local exchange carriers as well as other external companies for billing and collecting from AT&T customers should be included in general and administrative expense
  - Development of internal sales/administrative/billing systems infrastructure.
  - Direct employee benefits Initial recording of expenses associated with furnishing active and retired employee benefits such as disability, pension, accident, savings plan contributions and retired employee insurance. Active employee insurance is reported in the same category as the employee wages. (Used only by HR Finance)
  - Other G&A Expense Expenses incurred for executive, general, and administrative support functions should be reported in Other G&A expense.

### General and Administrative Expenses (continued)

- 42. Other G&A expense includes the following functions:
  - Executive officer level and above (generally sixth level and above and any directly reporting executive support staff)
  - Accounting and Finance accounting and financial reporting, billing and collecting, functions associated with taxes, treasury and insurance operations, financial management, etc.
  - *Public Relations* media communications, corporate publications, employee information
  - *Human Resources* policy development on matters relating to personnel, salary, benefits, etc.
  - Corporate Information Technology Services management information systems designed to support corporate functions and general data systems functions which cannot readily be allocated to users
  - Legal general counsel and litigation support, SEC, FCC, and other regulatory, antitrust expenses, etc.
- 43. In the case where fees are paid to external parties for legal and other services performed in direct connection with an acquisition of an asset, the costs associated with the acquisition should be capitalized as part of the acquisition rather than classified as G&A expense. See AT&T policies PO 93-05-003, AL 10-5, Cost Recognition and Reporting and Al 93-04-002, AL 3-6, Accounting Guidelines for Mergers and Acquisitions.
- 44. Examples of costs to be included in Other G&A expense include salaries, wages and expenses of employees performing G&A functions, allocated portions of employee benefit expenses, occupancy charges such as rent, utilities and house service, material and supplies and allocated portions of support services such as clerical and secretarial work, printing and reproduction, and allocated management information systems costs.
- 45. Overhead expenses which *directly support* business functions, e.g., payroll time reporting and input performed within a functional (e.g., Marketing) organization for functional (e.g., Marketing) workers, should be classified to accounts associated with the functions being supported (e.g., M&S).
- 46. Interest accruals on all tax related items is considered an overall corporate expense and should be reported in the general and administrative category.

AT&T's Responses to BellSouth's First Set of Interrogatories KPSC Docket No. 2003-00379 12/15/2003 Attachment No. 48

# ATTACHMENT TO INTERROGATORY NO. 48

### Marketing and Sales-Related Expenses

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### **Marketing and Product Management**

- 32. Marketing and Product Management includes the following activities:
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  - Planning for development and introduction of new services
  - · Development of pricing strategies and contract terms

### **Advertising Expense**

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- 34. Advertising expenses include all costs of creating, producing and implementing advertising including agency fees. Advertising expense should include the following:
  - Service specific advertising activities
  - Non-service specific advertising such as support of sports events, sponsorship of other public events and campaigns
  - Television and radio advertising

### Marketing and Sales-Related Expenses (continued)

### Advertising Expense (continued)

- Direct-mail, newspaper, and other print advertising
- Company and product catalogues
- · Billboard advertisements
- 35. Advertising expenses DO NOT include free minutes and other discounts (contra revenue).

### **Promotions and Offer Costs**

- 36. Promotions and offer costs include expenses for promotional activities such as exhibits/displays at trade fairs, gifts given to present and prospective customers, inducements to customers for unrelated products/services that are not part of the normal offerings of the selling business unit, incentives to acquire/retain customers (loyalty programs), and the offer costs of issuing checks
- 37. Promotional expenses and offer costs DO NOT include free minutes and other discounts (contra revenue).

### Sales and Sales Support

- 38. Includes the expenses of employees who directly interface with customers and sell AT&T products and services or support customer sales. Includes items such as:
  - · Expenses of locating customers and soliciting sales
  - Technical support expenses relating to specific contracts, e.g., analysis of specifications engineering for specific product applications, responding to potential customer inquiries, etc.
  - · Pricing of specific orders
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### Marketing and Sales-Related Expenses (continued)

### **Customer Care**

- 40. Includes costs associated with managing and administering customer accounts. Customer Care includes the following functions and activities:
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  - Entering and processing service orders and handling order inquiries.
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  - Planning, training and project management functions performed by Customer Care organizations

### **General and Administrative Expenses**

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  - Customer account management billing operations, This category includes bill rendering, customer payment processing, credit and collections, and bill printing and mailing costs.
  - Contracted billing services The amounts paid to local exchange carriers as well as other external companies for billing and collecting from AT&T customers should be included in general and administrative expense
  - Development of internal sales/administrative/billing systems infrastructure.
  - Direct employee benefits Initial recording of expenses associated with furnishing active and retired employee benefits such as disability, pension, accident, savings plan contributions and retired employee insurance. Active employee insurance is reported in the same category as the employee wages. (Used only by HR Finance)
  - Other G&A Expense Expenses incurred for executive, general, and administrative support functions should be reported in Other G&A expense.

### **General and Administrative Expenses** (continued)

- 42. Other G&A expense includes the following functions:
  - Executive officer level and above (generally sixth level and above and any directly reporting executive support staff)
  - Accounting and Finance accounting and financial reporting, billing and collecting, functions associated with taxes, treasury and insurance operations, financial management, etc.
  - *Public Relations* media communications, corporate publications, employee information
  - Human Resources policy development on matters relating to personnel, salary, benefits, etc.
  - Corporate Information Technology Services management information systems designed to support corporate functions and general data systems functions which cannot readily be allocated to users
  - Legal general counsel and litigation support, SEC, FCC, and other regulatory, antitrust expenses, etc.
- 43. In the case where fees are paid to external parties for legal and other services performed in direct connection with an acquisition of an asset, the costs associated with the acquisition should be capitalized as part of the acquisition rather than classified as G&A expense. See AT&T policies PO 93-05-003, AL 10-5, Cost Recognition and Reporting and Al 93-04-002, AL 3-6, Accounting Guidelines for Mergers and Acquisitions.
- 44. Examples of costs to be included in Other G&A expense include salaries, wages and expenses of employees performing G&A functions, allocated portions of employee benefit expenses, occupancy charges such as rent, utilities and house service, material and supplies and allocated portions of support services such as clerical and secretarial work, printing and reproduction, and allocated management information systems costs.
- 45. Overhead expenses which *directly support* business functions, e.g., payroll time reporting and input performed within a functional (e.g., Marketing) organization for functional (e.g., Marketing) workers, should be classified to accounts associated with the functions being supported (e.g., M&S).
- 46. Interest accruals on all tax related items is considered an overall corporate expense and should be reported in the general and administrative category.

AT&T's Responses to BellSouth's First Set of Interrogatories KPSC Docket No. 2003-00379 12/15/2003 Attachment No. 53

# ATTACHMENT TO INTERROGATORY NO. 53

# Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

	<del></del>	
	)	
In the Matter of	)	
	)	CC Docket No. 01-339,
Review of the Section 251	)	No. 96-98 &
Unbundling	)	No. 98-147
Obligations of Incumbent Local	)	
Exchange Carriers	)	
	)	

### DECLARATION OF IRWIN GERSZBERG ON BEHALF OF AT&T CORP.

### I. BACKGROUND

- 1. My name is Irwin Gerszberg. I am a Division Manager in the Advanced Local Network Access Technology Organization for AT&T Local Services in Florham Park, NJ. The organization that I lead is responsible for all "Last Mile" Access Technologies for the AT&T Local Services Network Accordingly, I have a detailed understanding of the architecture, facilities and equipment used in local networks.
- I received a Bachelor's degree in Electrical Engineering from the New Jersey Institute of Technology and a Master's degree in Computer Science from Stevens Institute of Technology I joined the Bell System in 1978. While at Bell Laboratories, I managed large software projects for the Regional Bell Operating Companies ("RBOCs") in advanced operations and testing of the local exchange network. In 1985, I led one of AT&T's first Speech Response/Voice Recognition Trials with the RBOCs In 1989, I joined AT&T's Wireless unit, where I was responsible for the development of numerous advanced wireless technology services

- Since that time, through a variety of positions, I have explored network architectures that encourage the development of high-speed broadband technology into homes and businesses i.e., services based upon DSL transmission technology. In particular, I created many of the applications and devices used to provide high-speed services that are DSL-based My inventions include, for example, a version of an Integrated Access Device that allows service providers to deliver multiple services (e.g., high-speed data, packet voice lines, video) over a single twisted pair (Patent No US6359881). I hold patents for other inventions that permit customers to easily perform multiple-line voice and data installations and integrate their communications devices with wireless technology.
- I hold 65 Patents on local access technologies covering DSL, Voice over DSL, IP 4. Cable telephony, Broadband Wireless and a vast array of emerging broadband infrastructure and services. For instance, another of my inventions specifies a technique to dynamically allocate and actively manage available bandwidth to voice and high-speed data services over twisted pair (Patent No. US6307839). I am a member of the New Jersey Technology Counsel, the Association Public-Safety Communication Officials. the Society Cable Telecommunications Engineers, and the Institute of Electrical and Electronic Engineers. As a result of my work, I earned AT&T's Science and Technology Medal in 2001 In addition, in February 2002, I was named "New Jersey Inventor of the Year" by the State of New Jersey and inducted into the New Jersey Inventors' Hall of Congress for my contributions to science and technology in the telecommunications industry.

### II. SUMMARY AND INTRODUCTION

The purpose of my declaration is to describe a means by which customers obtaining local telecommunications services via traditional voice-grade loops may switch carriers using an electronic process. Copper loops generally are "hard-wired" to the incumbent

local exchange carrier's ("ILECs") facilities and switch, although the precise method of the hard-wired connection can vary depending on the network architecture employed by the ILEC. When a customer seeks to change to another local carrier that uses its own switch, ILEC technicians typically must remove the existing hard-wired connection and then install a new connection to equipment connected to the new local carrier's switch.

- 6. From an engineering standpoint, it would be far preferable to avoid the often significant manual work associated with changing the hard-wired connections. Ideally, customers should be able to change local carriers using a fully mechanized and integrated process, specifically a software-controlled process that relies upon software-defined links like the process used for customers changing their long distance provider. At AT&T's request, I have investigated a way in which ILECs and competing carriers could deploy new equipment that would permit such an electronic process to be used for the copper loops that serve most customers. Under this solution, which AT&T refers to as "electronic loop provisioning," or ELP, many network facilities, including the existing loop distribution facilities and customer premises equipment, are unchanged. What is changed or, more precisely, upgraded is the transmission equipment that connects a customer's loop to its local carrier's switch. Critically, it is this upgrade to the transmission equipment that allows customers to switch local providers using a software-controlled process.
- 7. ELP deploys equipment that converts all of the customer's telecommunications services both data and voice into packets of data "Packetizing" data communications is already commonly performed when a customer purchases DSL-based service. There, the local service provider deploys equipment that packetizes only the portion of the communications that use the high frequency spectrum ("HFS") of the loop. However, the decision to packetize only

this portion of the communications is not dictated by any technical concerns. In fact, under ELP, this same concept would be extended to all communications, including voice communications that generally occupy the low frequency spectrum ("LFS") portion of the loop. This modest change is nonetheless fundamental, because it allows the customer to change local carriers electronically.

- ELP can be deployed today using equipment that vendors are currently offering. Indeed, customers with DSL-based services already use modems that include much of the technology that also would be used with ELP. Thus, ELP relies on much of the existing local network facilities, but deploys upgraded and/or additional equipment that provides the ability to change carriers electronically. In fact, in order to improve the efficiencies and capabilities of their networks, incumbent carriers today are already deploying equipment and facilities similar to or the same as what would be deployed under ELP i.e., digital loop carriers, ATM modules, and fiber transport facilities. However, the incumbent carriers currently deploy this technology in a manner that benefits only their own service offerings, and that in fact significantly hinders the efforts of competing carriers to provide service. The ELP architecture, by contrast, deploys this type of equipment in a manner that permits all carriers, including the incumbent, to have an equal opportunity to readily access a customer's loop using an electronic process.
- 9 ELP therefore has significant benefits for competition, but it is also superior from an engineering and operational perspective Most notably, it eliminates the need for manual "hot cuts" on the customer's facilities to break the existing hard-wired connection a process that is inefficient, unreliable, and prone to error. The ELP architecture also promotes advanced services such as xDSL high-speed data, can provide additional voice lines using the same loop for all services, and can be engineered in a manner (if so desired) to increase network reliability

- III. <u>ELECTRONIC LOOP PROVISIONING BUILDS ON THE EXISTING NETWORK AND COULD BE IMPLEMENTED TODAY USING READILY AVAILABLE TECHNOLOGY</u>
  - A. For A Customer To Change Local Service Providers, The ILECs' Current
    Network Architecture Requires Manual Changes To The Facilities Serving
    The Customer
- 10. Before explaining how ELP can be implemented, it is important to understand how local service is typically provided to customers served with voice-grade loops. In some cases, copper facilities are used all the way from the customer premises to the incumbent LEC's central office, the building where end-users' loops are joined to switching equipment. In this instance, the copper loops are hard-wired to a Main Distribution Frame, ("MDF"), and are then "cross-connected" using another copper wire (or "jumper") to a hard-wired connection on the other side of the MDF. The other hard-wired connection is then connected to the ILEC switch
- service to a switch-based competitor of the ILEC, an ILEC technician must generally perform a "coordinated hot cut" This intensely manual process requires the technician to remove the existing cross-connect, and then install a new cross-connect so that the customer's loop is terminated on equipment located in the competitor's collocation cage, rather than the ILEC switch. I am aware that AT&T has had significant problems in using hot cuts to serve customers. While the details of those problems are fully described in other portions of AT&T's filing, the critical fact for the purpose of my declaration is that when a customer seeks to change its local service from the incumbent LEC to another local carrier that uses its own switch, significant manual work is required on the loop facilities that serve that customer. As a general rule, when compared to software-controlled processes, manual work is costly, slow, and more prone to error

- 12. Increasingly, the incumbent carriers have deployed digital loop carriers ("DLCs"), which are pieces of equipment that are often located remotely from the central office and closer to the customer premises. The DLC and associated equipment takes the communications coming over the copper loops and converts the signal into a digital format, so that communications can be transported more efficiently to the central office
- In a standard configuration for DLC existing today, a copper loop runs directly from the customer's premises to a serving area interface ("SAI"). This portion of the loop is known as the distribution plant. The SAI is a point where the copper distribution "sub-loop" from a number of customers terminate. Typically, the loops are cross-connected to additional copper facilities that connects the SAI to a remote terminal ("RT"). RTs are enclosures often located in the ILEC's outside plant i e, closer to the customers' premises. The remote terminal typically houses the DLC and other equipment that converts the analog voice communication into a digital format.\(^1\) At that juncture, all the communications from the loops on the DLC are multiplexed together (to efficiently utilize costly transmission facilities) and transmitted through facilities (either fiber or copper wire) commonly known as the feeder plant of the local loop. The traffic carried over the feeder plant is terminated directly onto the ILEC's local circuit switch, and is not demultiplexed. Accordingly, in a DLC architecture, an individual customer's traffic arrives at the central office commingled with other customers' traffic
- 14 Because of this fact, where DLC architecture is employed, it is even more difficult to switch a customer's voice-grade loop to a competing carrier's facilities. To serve a

<sup>&</sup>lt;sup>1</sup> It is important to note that when the copper loops are sufficiently short, DLC equipment can just as easily be deployed in the central office, rather than a remote terminal. Indeed, this is precisely what a competing carrier must do in order to access a voice-grade loop via a hot cut The competing carrier places DLC equipment into collocation that digitizes and multiplexes the voice-grade loops for backhaul to its switch

customer whose loop is connected to a DLC, the incumbent carrier must be able to separate the traffic from a particular customer from the traffic of other customers that is commingled on the feeder facility. Unfortunately, the available processes for removing the customer's loop from the DLC can be even more cumbersome than when a main frame termination exists. Such methods can be time consuming, entail significant costs that the incumbent may seek to impose on the new carrier, and may also cause the customer to receive a degraded level of service.

- loop is to remove the customer's loop from the DLC and place it back onto an older copper loop that extends from the customer's premises to the central office. However, this method presents a number of difficulties. First, the process of transferring the DLC loop to a copper "spare" loop requires an additional set of manual processes in addition to the hot cut that I described above. Second, any spare copper loop has necessarily been placed out of service by the ILEC, frequently because they offer customers inferior quality to the digital service provided over DLC. Third, where DLC has been employed from the outset, as frequently occurs in newly constructed areas, there may simply be no spare copper loop at all. Fourth, a spare copper loop necessarily has a longer length of copper than a DLC loop, and reverting to the spare loop lowers the available bandwidth on the loop compared to the DLC loop and necessarily results in a lower grade of service capability
- 16. Other methods for removing a loop from a DLC so that it can be made available to a competitor are equally flawed. For example, the ILEC could install demultiplexing equipment before the feeder facility terminates into the ILEC circuit switch. That would demultiplex *all* of the traffic from a DLC-fed feeder and re-convert the traffic from a digital to an analog format. The particular loop used to serve the customer won by the competing carrier

would then be separated through the hot cut procedure from the other loops and then connected to the carrier's facilities in collocated space. At that juncture, the competitor would again convert the analog signal on that loop to digital format and transport it over a DLC to its switch. It is obviously inefficient to perform all of the conversions needed to enable a competitor to obtain access to individual loops, and the cost of the additional conversions may make it prohibitively expensive to provide service

Thus, regardless of whether a voice-grade loop is connected to a DLC or terminates directly to the ILEC central office, customers that wish to change to a local carrier that uses its own switch must endure a difficult process that necessarily requires extensive manual work to the customer's existing facilities and that often results in more expensive and/or lower quality service.

# B. <u>ELP Architecture Would Permit Customers To Change Local Service Providers Electronically</u>

- Unlike the current local network architecture, once the ELP architecture has been implemented and communications on both the HFS and LFS portion of the loop are packetized, customers could easily change local carriers electronically without any further changes to the underlying facilities serving the customer
- The ELP architecture transforms the loop connection between an end user and the customer's chosen local carrier from a hard-wired physical connection to one that is controlled by software. While the ELP architecture entails incremental investment to modernize the loop plant, it leverages existing investments already made by incumbent LECs and competitive local carriers. Notably, ELP functions with existing copper distribution loop plant and with existing circuit switches. In addition, customers generally will retain their existing customer premises equipment, inside wire, and network interface devices.

- 20. The transformation of the hard-wired connection to a software-controlled process is accomplished by techniques currently used in Asynchronous Transfer Mode (ATM) networks, a well-established technology that allows packets of data to be routed according to specified instructions. Specifically, communications on the HFS and LFS of the loop are broken into cells (which are the particular form of data packet employed in ATM technology), and each cell contains a "header" and other information that allows the transmission equipment to determine the physical facility over which the cells should be routed. The end result is a "permanent virtual circuit," which is not defined by a physical connection, but rather controlled by software.
- 21. The changes in technology and equipment that would be necessary to implement the ELP architecture can be viewed in three segments. The first segment pertains to the changes that are needed in the incumbent LECs' outside loop plant the portion of the network that is located outside of the central office up to the end-user premises. The second area where changes are needed is the incumbent LEC central office. The third set of changes relates to the equipment that would be used by all local carriers that elect to employ a traditional Class 5 circuit switched network to carry voice traffic under the ELP architecture. To illustrate the ELP

<sup>&</sup>lt;sup>2</sup> The circuit is permanent in that it is a static, provisioned connection between two points (e.g. the customer's copper facility and the network of the competitive local service provider) that is established via software configurations and commands PVCs are programmed and defined so that an end-user's traffic is always transmitted between the two particular points according to a pre-determined physical path. Unlike the existing local network architecture, which requires the use of cumbersome manual activities in order to re-wire an end-user to an alternative carrier, ATM technology inherent in ELP requires only that the virtual path be redefined by updates to ATM cell header information and ATM module routing tables Each ATM cell contains two main components—a header and a payload The header is comprised of several fields which, among other things, is used by ATM modules to route traffic ATM cell header information and ATM module routing tables work in conjunction to determine whether a particular PVC (and its associated end-user traffic) should be transported from the end-user to the ILEC's network or to that of an alternative carrier. Any change to a customer's local carrier merely requires updates to the cell header address and ATM module routing tables - each of which can be achieved easily via the use of software Simply put, ATM cells can be instructed by software to go from one point to another as desired—such electronic routing flexibility is the foundation of ELP

architecture, I have included a diagram that demonstrates how and where this equipment would be placed in carriers' networks See Figure 1.

### 1. The Incumbent LEC Outside Loop Plant

- 22. Under ELP, the key difference from the standard outside plant configuration described above is that transmission electronics in the RT, or DLC equipment, would be deployed or upgraded to digitize and packetize *all* communications traffic, not just the communications traffic in the HFS portion of the customers' loops, as is currently the case with ILECs' current DSL-based offerings. This packetization is performed by "true" Next Generation DLC ("tNGDLC") equipment that includes a functionality commonly known as a voice cell processor. Where the ILEC has already deployed a DLC, then that equipment would be upgraded to the tNGDLC. Where the customer loops terminate at the ILEC central office, then the tNGDLC functionality will be deployed at the central office
- The tNGDLC and its associated voice cell processor perform the critical function of digitizing and converting the voice signals into cells (or, for terminating calls, from cells into a bit stream and then an analog voice signal). Specifically, the tNGDLC equipment and the voice cell processors take the customers' telecommunications traffic both voice and data and convert it into the ATM packet format. For traffic originated by the customer, the tNGDLC electronics convert all communications into ATM cells and manage the transfer of these cells over transport facilities (generally fiber). Conversely, for traffic that is to be terminated to a

<sup>&</sup>lt;sup>3</sup> Critically, however, this is not a "new" technology Rather, it is the natural evolution of digital transmission technology, that has existed for many years In the 1970s the traditional loop architecture of copper pairs was supplemented by the introduction of DLC with high-capacity fiber feeder NGDLC simply permits improved signal discrimination and more efficient pair gain (multiplexing) so as to permit more data to transit a conductor per unit of time Moreover, the introduction of NGDLC architecture does not create new services Rather, the technology permits the ILECs to better employ the transmission capacity of existing facilities while also increasing their own economies in their loop plant

customer, the traffic is routed in ATM cell form to the RT, where the tNGDLC will direct the cells to the appropriate line card on which the customer's line is terminated <sup>4</sup> If a voice service is involved, the line card electronics will decompose the ATM packet cells into a binary stream (i e, a continuous stream of digits where each grouping of eight digits represents a number) and then into analog format (where the preceding numbers represent a particular voltage level of the analog waveform to be generated). As a result, no changes need to be made to the traditional telephone sets that a customer is using and end-users can continue to use existing CPE for traditional voice service. At the same time, customers that want advanced services, such as additional derived voice lines, DSL-based services, and/or other high speed data services, would need to install compatible CPE and the appropriate line card electronics would be required in the DLC <sup>5</sup> This is similar to the requirement that customers who today subscribe to DSL-based service must install a DSL modem on their computer.<sup>6</sup>

Once packetized by the tNGDLC equipment at the RT, all of a customer's telecommunications traffic is transported over a multiplexed facility, generally a high capacity fiber feeder facility, to the incumbent LEC central office. This is a significant improvement over the existing outside plant architecture that ILECs have traditionally deployed to support for DSL-

<sup>&</sup>lt;sup>4</sup> Although not necessary to implement ELP, additional efficiencies could be achieved if a remotely operated cross-connection device were deployed somewhere between the SAI and the RT. The cross-connection device would allow the carrier to change the line card that serves a customer remotely As a consequence, a customer could switch to a service requiring a different type of line card – from plain voice service to DSL, for example – without requiring a technician to visit the RT to manually switch the customer to a new line card

<sup>&</sup>lt;sup>5</sup> Specifically, such advanced services would require the deployment of a compatible Integrated Access Device (IAD) at the customer premises An IAD is simply a device that supports voice, data, and video information streams over a single circuit

<sup>&</sup>lt;sup>6</sup> Significantly, however, ELP should *not* require customers who already have DSL-based services to replace their modems (which are simply a type of IAD)

based services. Under the ILECs' current NGDLC architectures, separate feeder facilities are required an ATM facility to transport the HFS transmissions and a time-division multiplexed ("TDM") facility for the LFS transmissions. This is an inefficient and costly design, because two parallel facilities (each of which is typically backed-up with an alternative facility) are used to transport traffic between the very same points – the RT and the central office. By contrast, where *all* the traffic is packetized, as would occur with the ELP architecture, one common feeder facility can be used between the RT and the central office for all types of traffic.

### 2. The Incumbent LEC Central Office

- 25. Under the ELP architecture, the fiber facility that carries traffic from the RT would not connect directly to the ILEC circuit switch, as occurs today with copper loops. Instead, as with the HFS transmissions in the ILECs' NGDLC architecture, the feeder terminates at an ATM module. That module serves as a multiplexer that allows the RT electronics (and traffic from the customers' loops) to be shared among all local carriers' networks. ATM cells can carry any type of communications traffic, and ATM technology also permits strict enforcement of service quality levels that can vary by application 7
- The ATM module serves as the point of demarcation between the incumbent LEC loop plant and the network of all local carriers, including the incumbent. The ATM module would also serve as the interconnection gateway for carriers to access the loops of retail customers. This is necessary because, as with "ordinary" NGDLC technology, the ATM module is the point at which all of the packetized communications converge for all the loops served by the feeder facility. Thus, the ATM module under the ELP architecture, as with any other multiplexer/demultiplexer, is necessary to sort out the commingled traffic carried by the feeder

<sup>&</sup>lt;sup>7</sup> For example, an ATM can be configured to provide a higher priority to identified categories of cells (e.g., for certain customers or for certain types of traffic)

facility and deliver it to the customer's chosen carrier, whether an ILEC or a competitor. Likewise, the ATM module must sort the cells received from various carriers so that they are "cross-connected" – by the software-controlled permanent virtual circuit – to the correct RT and customer facility. Indeed, without this sorting function, no carrier, including the incumbent, can identify its own customers' traffic for delivery to its network

- 27. Each local carrier seeking to serve customers whose loops terminate at that central office, including the ILEC, would use appropriate facilities connected to the ATM module (e.g. Type I or Type II DS-1, DS-3, OC-3, etc transport facilities) to transport its end-user traffic to its own network (e.g. circuit switched and/or packet networks based on the carrier and service being provided). By connecting to the ATM module, any competing local carrier could readily access the facilities used to serve all end-users connected to the central offices where the ATM is located All competing carriers, including the incumbent LEC, would be assigned one or more physical ports on the ATM module (e.g. DS-1, DS-3, OC-3, etc. ports), and the telecommunications traffic from their end-users would be identified by the ATM and directed to that port(s) for transport to the identified carrier's network based upon the permanent virtual circuit established for the customer-carrier combination.
- The ATM module and the associated tNGDLC located at the RT allow a customer to switch local carriers electronically, with no manual or physical changes to the underlying facilities, because, as described earlier, the ATM technology inherent to ELP creates the permanent virtual circuit for each customer. As a consequence, if a customer wishes to change

<sup>&</sup>lt;sup>8</sup> The incumbents' circuit switches would be located in the same central office, and their packet switches would likely be located there as well Competitors' packet switches may be collocated in the same central office as the ATM, at a hub collocation or elsewhere However, if a CLEC deploys a traditional circuit switch, the Commission's rules would not permit it to be placed in a collocation

service providers, the ELP architecture allows that migration to occur entirely using software, with no need for a manual hot cut. A software command to the ATM module, and the associated tNGDLC electronics at the RT, allows the existing path to one carrier's network to be re-defined to a new carrier's network

### 3. VoATM Gateways

- 29. In order for packetized voice communications traffic to be handled by traditional circuit switched voice networks, VoATM gateway equipment must be deployed by all local carriers that wish to serve customers under the ELP architecture using a traditional circuit switched network
- 30. For transmissions from the circuit switched PSTN that will be terminated to the customer, the VoATM gateway converts TDM-based voice traffic to ATM cells. For telecommunications traffic originated by the customer towards the circuit switch network, the VoATM gateway processes the voice packets to meet the GR-303 or GR-8 protocol, which are interface requirements for connecting the local loop to a Class 5 switch. DLCs equipped with these interfaces are commonly found in local carriers' networks. Vendors of VoATM gateways utilize a GR-303 or GR-8 interface to preserve the carriers' investment in Class 5 switching equipment. The GR-303/GR-8-equipped gateway will allow service providers to deliver service to end users that utilize the full feature set of the Class 5 switch.
- As a result, despite the modernization of the loop architecture, end-users will continue to have to all Class 5 switch features without any modification required of the Class 5 switch network, and the current investment in Class 5 switches can remain in place

### C. The ELP Architecture Can Be Deployed Today

32 Most significantly, the ELP architecture relies entirely on equipment that is readily available from vendors The foundation for ELP architecture is the application of ATM

technology to the entirety of customers' traffic ATM is a tried and tested technology that is already widely deployed Moreover, all of the equipment that takes advantage of ATM technology and which represent the significant network elements of the ELP architecture – tNGDLC, ATM modules and VoATM gateways – are generally available today.

While it would take considerable effort to implement ELP technology simultaneously on a nationwide basis, the architecture permits a phased-in approach so that the necessary equipment could be deployed by ILECs in stages. This is also how long distance equal access technologies were deployed in the 1980s. See Attachment G to AT&T's Comments.

### IV. ELP PROVIDES SIGNIFICANT ENGINEERING BENEFITS

- The ELP architecture offers numerous benefits over the ILECs' current network. Most significantly, customers would be able to change local service providers electronically, and without any manual work on underlying facilities. While that of course provides enormous benefits for competition, as an engineer, I focus on the technical and operational benefits, which are also highly substantial
- First, from an engineering and operational standpoint, it is far preferable for competing carriers to be able to use software to access a customer's loop, rather than rely on manual work by technicians. The hot cut process requires significant manual processing, and introduces a number of points-of-failure of the sort that engineers strive to avoid when designing a network. Manual activity brings with it opportunity for human error, as well as increases in delay and cost, that generally can be avoided through automation. By contrast, an electronic,

<sup>&</sup>lt;sup>9</sup> Notably, an automated process reduces the need for technicians of competing carriers to work in and around the ILEC central office As I understand it, several ILECs have recently flagged this issue as a security concern

software-defined process for changing carriers is more reliable, offers improved functionality, and is more efficient – all attributes that are critical functions in a properly designed network.

- 36. Second, the ELP architecture uses much existing technology, while permitting customers to have better access to high speed or advanced services networks. ELP does not require carriers to forego serving such markets because of the impracticality of replacing or partially replicating the ILECs' loop plant. At the same time, from the ILECs' perspective, ELP uses the existing network interface devices, copper distribution, and existing fiber feeder.
- Moreover, ELP enables carriers and customers to obtain the benefits of an advanced network that offers electronic access to loops and to customers. Customers seeking advanced services can use existing DSL technology with ELP architecture <sup>10</sup> In addition, the approach has the potential to standardize a wireline broadband interface to customers, which, in turn, would almost certainly encourage new broadband applications and a proliferation of core advanced services networks. Customers that require only voice services may continue to use their existing equipment, but get the benefits of competition. The ELP architecture will allow delivery of voice services that are equivalent to the current ILEC voiceband services in terms of performance and reliability. From the perspective of the Class 5 switch, the ELP architecture presents an interface that is equivalent to GR-303/GR-8 technology in common usage today.
- 38. In addition, the ELP architecture, if so desired, can be engineered to account for other considerations such as increased network survivability in the face of network disasters natural or other. For example a fiber feeder ring architecture could be implemented that would link sub-tending RTs (and their associated electronics, e.g. tNGDLCs) to one or more ILEC.

<sup>&</sup>lt;sup>10</sup> To do this, the customer would require the appropriate premises equipment and the incumbent would need to provide appropriate interfacing line card electronics in the DLC with those electronics being incremental costs not associated with POTS

central offices, therefore mitigating the impact of a disaster upon end-users. Naturally, the benefits of such considerations must be placed in the context of the incremental investment that will be necessary to achieve them Nonetheless, it is important to keep in mind that the ELP architecture is sufficiently flexible in design in order for such considerations to be accounted for in the architecture.

### **VERIFICATION PAGE**

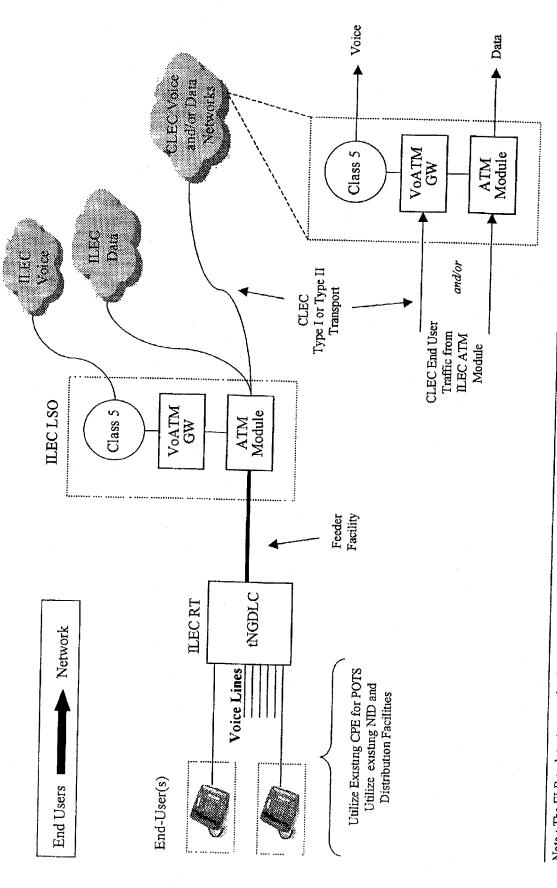
I hereby declare under penalty of perjury that the foregoing is true and accurate to the best of my knowledge and belief.

Irwin Gerszberg

April 4, 2002

Exhibit 1

# General ELP Network Architecture Diagram



Note · The ELP architecture can be designed and engineered in several different ways. This is a general illustration of the ELP architecture / flow through.

AT&T's Responses to BellSouth's First Set of Interrogatories KPSC Docket No. 2003-00379 12/15/2003 Attachment No. 69

# ATTACHMENT TO INTERROGATORY NO. 69

# Florida Competitive Issues Forum Tracking Tool

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Impact <sup>2</sup> Effort <sup>4</sup> Status <sup>5</sup>			red. This delays the orders for an ities will be available. In February, retail analog ranged from .69 % to			
Title <sup>2</sup>	Pending Facilities		There are a high number of pending facilities in Florida when UNE loops or T1s are ordered. This delays the orders for an unpredictable amount of time, and BellSouth cannot generally give a firm date when facilities will be available. In February, from 6.66 to 13.79% of analog UNE loop orders were placed in jeopardy in Florida. The retail analog ranged from .69 % to 1.40%. Digital loops ranged from 10.17% to 51.41%.	Maccing Motes	Resolution	HOXINGON
Original Iss # (s) Issue # (if applicable) <sup>1</sup>	41	Originating Company (ies):	There are a high number of unpredictable amount of time from 6.66 to 13.79% of analo	The state of the s		

# Florida Competitive Issues Forum Tracking Tool

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Impact				rocess via L			
Title	Manual Ordering for UNE-P		Description <sup>7</sup>	"Move" orders for UNE-P customers must be sent manually. AT&T requests an electronic process via LENS and EDL	Meeting Notes	Resolution	
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Issue # Original Iss # (s)	Title²	Impact	Effort Status	Status <sup>5</sup>
163	Lack of maintenance support			
Originating Company (ies):				
	Description'			
AT&T experiences problems when	when reporting troubles that happen immediately post provisioning. The CWINS maintenance	g. The CW	TNS main	tenance
center claims the problem is with		they claim	the probl	em is a
-	maintenance issue.			
	Meeting Notes <sup>8</sup>			
	Resolution			

	Impact		
	Title	Anti-competitive win-back practices of BellSouth	
	Original Iss # (s) (if applicable) <sup>1</sup>	N/A	ig Company (ies):
)	Issue #		Originating

Status

Effort\*

BellSouth is distributing a flyer to customers which portray CLECs negatively, and which should be stopped as an anticompetitive practice. (See Attached)

Meeting Notes<sup>8</sup> Resolution AT&T's Responses to BellSouth's First Set of Interrogatories KPSC Docket No. 2003-00379 12/15/2003 Attachment No. 69A

# ATTACHMENT TO INTERROGATORY NO. 69A

-----Original Message-----

From: Sent: Seigler, Bernadette M (Bern), CSLSM Friday, May 02, 2003 10:08 AM 'Change.Control@bridge.bellsouth.com'

To: Cc:

Jureidini, Jordana M, CSLSM; 'Cottingham, Valerie'

Subject:

UNE to UNE Bulk

BellSouth Change Control,

For the last few months, AT&T and the BellSouth Change Control team have engaged in a Q&A regarding the Manual Interim Process (and Trial) for CR0215, UNE to UNE Bulk Migrations.

In the course of these Q&A discussions, it has become evident that the way in which the CR was implemented leaves AT&T customers with a higher risk of losing service than the individual LSR process currently in place For example, BellSouth's bulk migration process eliminates time specific hot cuts. Not only does this put AT&T's customers at greater risk, it clearly was not sought nor contemplated in CR0215. Further, BellSouth has made clear that it will not perform bulk migrations after hours, although this too is beyond the scope for CR0215 and also is contrary to Section 3.7.2. of the AT&T/BellSouth interconnection agreement

In the 30 months since the CR was submitted, AT&T continues to believe that it is critical that the end user customer experience with the migrations include minimized risk and outage duration. Since the current manua or electronic UNE to UNE Bulk Migration Process still includes outage risks to end users, AT&T is not in a position to participate in either process at this time.

AT&T requests that BellSouth develop plans immediately to enhance the UNE to UNE Bulk Migration Process to reduce the risk potential for customer outages in a 2003 release.

Thank you,

Bernadette Seigler
AVP
AT&T Local Services & Access Management
So. Region OSS Interconnection
V: 404-810-8956
Fax: 404-810-8605 or 281-664-3731
Pager: 888-858-7243 Pin: 125159
Email: bseigler@att.com

----Original Message-----

From:

Seigler, Bernadette M (Bern) - NKLAM

Sent:

Sunday, August 31, 2003 6:34 AM

To:

Change Control [Change.Control@bellsouth.com]

Cc:

Jureidini, Jordana M - NKLAM; Janet. Fields@bellsouth.com; Cottingham, Valerie

Subject:

RE: AT&T's Response to BellSouth's Response to AT&T's concerns re: UNE to UNE Bulk Migrations

email sent August 31, 2003 at 6:30 AM ET

### Change Management Team:

I'm distressed by your response and lack of appreciation for AT&T's goal of proactively working with BellSouth in the development and implementing a UNE-L bulk ordering process. AT&T has continued to wor with BellSouth in the development of this process only to be disappointed in BellSouth's lack of regard for end user experience. BellSouth's latest response back in May to AT&T is not acceptable as it only continues to impair the CLECs ability to have a bulk ordering process with safeguards for the end customer experience.

BellSouth's proposed UNE Bulk process is substantially inferior to the current Coordinated Hot Cut Process ic single conversions, which is utilized by AT&T under the terms and conditions of the current ICA. In fact, in spite of the development of a detailed individual hot cut process, designed to meet customer expectations and minimize customer disruptions, BellSouth's proposed UNE-Bulk process does not even address those minimus concerns. For example, the bulk process eliminates time specific cuts and involuntarily increases the risk of th customer being placed out of service because the CLEC cannot plan or anticipate when the conversion will tak place. BellSouth has additionally stated that conversions will not take place Out of Hours. CLECs are again placed at an additional disadvantage because most customers are unwilling to be taken out of service without some way of predicting when it will take place.

AT&T believes, and continues to stress, that the conversion process should be designed to remove as much risk to the end-user as possible. Out of Hours conversions would make the transition of service most transparent to the end user and are also critical to those businesses are not willing to have service disrupted during BellSouth' defined normal business hours.

AT&T has discussed this with BellSouth previously, as it has always been AT&T's desire that the bulk conversion process eliminate many of today's problems with customer outages and impairments. AT&T's position has not changed since our initial letter in August 2002. In fact, AT&T issued follow up correspondence in October, 2002, requesting a New Business Request (NBR) to address ALL issues, which BellSouth has continually refused to address in its own proposed UNE-L Bulk Ordering Process.

AT&T believes that it would be most productive to defer additional discussion until the ramifications of the FCC order are clear, which will hopefully give more specific direction around the contents of such a UNE Bulk conversion process.

Sincerely,

State of the State

Assistant Vice President

AT&T Local Services & Access Management

Southeast Region Local Supplier Management & OSS Interconnection

V: 404-810-8956

Fax: 281-664-3731 or 404-810-8605 Pager: 888-858-7243 Pin: 125159

Email: bseigler@att.com

----Original Message-----

From: Change.Control@bridge.bellsouth.com [mailto:Change.Control@bridge.bellsouth.com]

Sent: Friday, May 09, 2003 4:44 PM
To: Seigler, Bernadette M (Bern), CSLSM

**Subject:** BellSouth Response to AT&T's concerns re: UNE to UNE Bulk Migrations

<< File: BellSouth >> << File: U2U.DOC >>

August 30, 2002

#### VIA FACSIMILE AND MAIL

Jim Schenk
BellSouth Telecommunications, Inc.
600 North 19th Street
8th Floor
Birmingham, Alabama 35203

RE: Coordinated Bulk Hot Cut Process

#### Dear Jim:

The purpose of this letter is to request BellSouth's adoption of a new process in our companies' efforts to address the insufficiency in today's loop-by-loop hot cut process. As we have discussed on several occasions, in spite of its commitment to serving customers on our own local network, AT&T has found it increasingly difficult to use unbundled loops to provide service to our small business local customers. While there are many factors, the inability to complete individual hot cuts in a commercially reasonable manner has proven to be a significant initial hurdle. In fact, in spite of the development of detailed individual hot cut processes to avoid outages, our experience has shown that current methods are unreliable, uneconomical and incapable of sustaining commercial volumes in a competitive environment.

However, AT&T has achieved a small measure of success in New York where, using an outside contractor, AT&T has been able to convert thousands of customers to AT&T's network using a bulk hot cut process. We wish to implement a similar process in the BellSouth territory. This process allows for the project-based conversion of a number of AT&T customers within a single local serving office ("LSO") and takes advantage of the efficiency of converting a number of lines, after regular business hours, with real time coordination between AT&T and BellSouth. Contrary to the current individual hot cut processes, the bulk conversion process can eliminate many of today's problems with customer outages and the lack of commercial volumes, while at the same time significantly lowering the cost to both BellSouth and AT&T.

Based on the New York experience, it is clear that it would be worthwhile to develop a process which would allow AT&T to migrate those customers currently served on the

RE: Coordinated Bulk Hot Cut Process Page 2 of 2

UNE platform to AT&T's own network using unbundled loops. More importantly, because a bulk conversion process will be less costly for BellSouth to implement, we would anticipate substantial reductions on UNE-L hot cut charges associated with this process. Therefore, I am now asking for your commitment to work collaboratively with AT&T to fully document and implement the necessary procedures for such bulk conversions. AT&T has identified a number of factors that must be addressed in order to ensure a successful process. Although probably not a comprehensive list, these factors include:

- The ability to convert between 100 250 lines within a single LSO at one time;
- The development of a streamlined ordering process to avoid unnecessary individual orders and both the work and costs associated with them;
- A project managed focus at both AT&T and the BellSouth;
- BellSouth's conversion readiness, including dial-tone/ANI testing, loop qualification testing and pre-wiring in advance of the conversion;
- Dedicated personnel at BellSouth for the duration of the conversion process, including personnel able to resolve CFA discrepancies identified during the bulk conversion;
- Commitment of immediate service restoration in the event of a service outage during the conversion process;
- The development of appropriate measurements and tracking to ensure the quality of the process, and if necessary, to further improve the process;
- Substantially reduced prices for UNE-L hot cuts to take into account reduced costs for BellSouth.

Additional requirements, which, we believe, BellSouth already delivers via COSMOS and LENS, are the electronic access to BellSouth's CFA inventory and the ability to identify spare and utilized facilities.

In order to most efficiently develop and test a bulk hot cut process, I suggest that each company designate a representative to lead our implementation teams with this effort. I will lead the AT&T team and ask that you designate the appropriate BellSouth team leader as soon as possible. Given the importance of this process to any attempt by AT&T to use unbundled loops to serve our customers, I ask that negotiations on the process begin no later than September 16, 2002.

Sincerely,

cc: Greg Terry



BellSouth Interconnection Services 1960 West Exchange Place Suite 200 Tucker, GA 30084

AT&T Regional Account Team 770-492-7550 Fax 770-492-9412

September 20, 2002

Ms. Denise Berger AT&T Room 12256 1200 Peachtree St. NE Atlanta, GA 30309

Dear Denise:

This is in response to your letter of August 30, 2002, regarding AT&T's request that BellSouth adopt a new process for coordinated conversions (hot cuts) of unbundled loop service.

At the outset, your letter makes statements about the quality of BellSouth's current hot cut process performance that do not accurately reflect the level of service BellSouth provides to AT&T. BellSouth has consistently performed AT&T's hot cuts well within the established benchmark, usually 100% within 15 minutes of AT&T's requested start time. BellSouth strongly disagrees with the characterization of its current hot cut methods as "unreliable." I have attached a copy of AT&T's Local Services' Performance trend chart for On Time Installation for Hot Cuts, January through June 2002, which AT&T presented in the last monthly Executive meeting. This chart indicates that AT&T is receiving excellent service from BellSouth on its Unbundled Network Element (UNE) Loop Hot Cut conversions. Furthermore, let me remind you that the hot cut process in your Interconnection Agreement was negotiated by you personally for numerous months. BellSouth is implementing that process not only correctly, but also at extremely high service levels.

Regarding AT&T's request that BellSouth implement a bulk conversion process to migrate AT&T's end users served by Unbundled Network Element-Platform (UNE-P) to UNE Loop, as we have discussed, BellSouth is implementing a bulk conversion process as a result of AT&T's Change Request CR0215. The final user requirements were reviewed with the CLEC community on July 9, 2002. During our conversation, however, you indicated that the new process resulting from CR0215 would not meet the needs of the internal AT&T organization. Those needs apparently have prompted the request for a different new process as outlined in your August 30 letter.

BellSouth believes that the conversion process currently in place, as a result of CR0215, will be a reliable, economical method to migrate "commercial volumes" of UNE-P customers to UNE-Loops and will be mechanized for further convenience by year-end. Nevertheless, AT&T has the option of submitting another CR for the development of a second bulk hot cut process.

Possibly, a more fitting avenue for AT&T's request is BellSouth's New Business Request (NBR). If AT&T needs bulk conversions without individual Local Service Requests (LSR), after normal business hours, with project management and real-time coordination, as well as personnel available after hours to assist AT&T in resolving Connecting Facility Assignment (CFA) discrepancies and immediate service restoration when necessary, the NBR process will allow BellSouth to develop the necessary procedures and establish the market-based rates for the additional resources this proposal would require. Contrary to

AT&T's assertions that the process described will be less costly to BellSouth and, therefore, should result in lower rates for UNE Loops, it will instead add significantly to BellSouth's cost to serve. Those costs, appropriately, will be passed on to AT&T as the recipient of these services.

If we need to further discuss BellSouth's position on AT&T's request, I can be reached at 205 321-4700.

Sincerely,

James M. Schenk

Attachment

Copy to: Greg Terry



Room 12256 1200 Peachtree Stree Allanta, Georgia 3030 404 810-8644 FAX 281 664-3648 PAGER 888 658-7243 WIRELESS 404 915-01 deberger@att.com

October 16, 2002

Jim Schenk
BellSouth Telecommunications, Inc.
600 North 19th Street
8th Floor
Birmingham, Alabama 35203

RE: UNE-P to UNE-L Coordinated Bulk Conversion Process

Dear Jim:

The purpose of this letter is to follow up on my August 30, 2002, letter to you requesting BellSouth's adoption of a new process to convert AT&T's UNE-P customers to UNE-L via a coordinated bulk conversion process. The purpose of this new process is to allow AT&T to move its customers to AT&T's facilities-based local network. This process should be a seamless transition for AT&T customers moving from UNE-P to the UNE loop with ported numbers.

Please accept this letter as a New Business Request (NBR) from AT&T in accordance with Attachment 10 of our Interconnection Agreement. I have attached a proposed project plan, which outlines the support that AT&T needs from BellSouth to make this project a success. AT&T's goals for this project are as follows: maximize the use of AT&T's local facilities by converting UNE-P customers to UNE loops and minimize any disruption during the transition of AT&T's customers from UNE-P to the UNE loop.

As noted in our previous correspondence, it is AT&T's experience that the bulk process significantly lowers the per line migration cost, including the number port. The economies of scale gained through performing bulk should generally cost less than \$5 per loop for this project as outlined in the attached project plan proposal.

Please let me know if additional information is needed to proceed with this project.

Sincerely,

cc: Greg Terry

Recycled Paper



Room 12256 1200 Poachtree Street NE Atlanta, Georgia 30309 404 810-8644 FAX 281 664-3648 PAGER 888 858-7243 PIN 123 WIRELESS 404 915-0796 deberger@att.com

June 9, 2003

Phillip Cook
BellSouth Interconnection Services
675 West Peachtree Street
Room 34H71
Atlanta, Georgia 30375

RE: NBR GA02-M931-00 Unbundled Network Element – Platform (UNE-P) to UNE-Loop (UNE-L) Coordinated Bulk Conversion Process

# Dear Phillip:

The purpose of this letter is to respond to your letter of May 30, 2003, regarding New Business Request (NBR) GA02-M931-00. Your letter stated that BellSouth, pursuant to Section 1.10 of Attachment 10 of the Interconnection Agreement, would consider the NBR cancelled if an acceptance or rejection response was not provided within five (5) days.

In its initial request on August 30, 2002, AT&T indicated that BellSouth's current hot cut methods were "unreliable, uneconomical and incapable of sustaining commercial volumes in a competitive environment" and proposed a new process, designed to address each concern. Unfortunately, BellSouth has failed to adequately address these concerns.

First, AT&T is disappointed that BellSouth did not provide adequate information regarding the impact to customers served by BellSouth's IDLC facilities. Further, AT&T requested a process, which would allow the conversion of up to 500 customers in two (2) central offices per evening. In its letter of November 20, 2002, BellSouth states,

"BellSouth has determined that AT&T's request is technically feasible with the following caveat:

The quantity of physical facilities and telephone numbers cut per evening will vary based on the load at the time the request is submitted, and will be driven by the actual number of lines per customer."

AT&T is distressed and concerned with this stated inability of BellSouth to sustain reasonable commercial volumes. AT&T finds BellSouth's unwillingness to commit to AT&T's modest request completely unacceptable.

Finally, BellSouth's ridiculous and excessive cost of \$134.32 per working telephone number, plus regular ordering charges, as well as other unspecified overtime and technician charges, prohibits commercial use. BellSouth has once again presented AT&T with a Hobson's choice: risk a devastating disruption of a customer's service or pay BellSouth a ransom to mitigate the risk.

Please consider this letter a rejection of BellSouth's preliminary analysis and firm quote.

Sincerely,

cc:

Steve Huels Jim Schenk AT&T's Responses to BellSouth's First Set of Interrogatories KPSC Docket No. 2003-00379 12/15/2003 Attachment No. 74

# ATTACHMENT TO INTERROGATORY NO. 74

August 30, 2002

#### VIA FACSIMILE AND MAIL

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8th Floor
Birmingham, Alabama 35203

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Attachment

Copy to: Greg Terry



Room 12256 1200 Peachtree Street NE Atlanta, Georgia 30309 404 810-8644 FAX 281 664-3648 PAGER 888 858-7243 PIN WIRELESS 404 915-0796 deberger@att.com

October 16, 2002

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BellSouth Telecommunications, Inc.
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Recycled Paper



Ruorn 12256 1200 Peachtree Street INE Atlanta, Georgia 30309 404 810-8644 FAX 281 664-3648 PAGER 888 858-7243 PIN 123468 WIRELESS 404 915-0796 deberger@att.com

June 9, 2003

Phillip Cook
BellSouth Interconnection Services
675 West Peachtree Street
Room 34H71
Atlanta, Georgia 30375

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Steve Huels Jim Schenk -----Original Message-----

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Seigler, Bernadette M (Bern), CSLSM Friday, May 02, 2003 10:08 AM

Sent: To:

'Change.Control@bridge.bellsouth.com'

Cc:

Jureidini, Jordana M, CSLSM; 'Cottingham, Valerie'

Subject:

UNE to UNE Bulk

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Thank you,

Bernadette Seigler AVP AT&T Local Services & Access Management So. Region OSS Interconnection V: 404-810-8956

Fax: 404-810-8605 or 281-664-3731 Pager: 888-858-7243 Pin: 125159

Email: bseigler@att.com

ł

----Original Message----

From:

Seigler, Bernadette M (Bern) - NKLAM

Sent: To:

Sunday, August 31, 2003 6:34 AM

Cc:

Change Control [Change.Control@bellsouth.com]

Jureidini, Jordana M - NKLAM; Janet. Fields@bellsouth.com; Cottingham, Valerie

Subject:

RE: AT&T's Response to BellSouth's Response to AT&T's concerns re: UNE to UNE Bulk Migrations

email sent August 31, 2003 at 6:30 AM ET

## Change Management Team:

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AT&T believes that it would be most productive to defer additional discussion until the ramifications of the FCC order are clear, which will hopefully give more specific direction around the contents of such a UNE Bulk conversion process.

Sincerely,

John Brown B. Barret

Assistant Vice President

AT&T Local Services & Access Management

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----Original Message----

From: Change.Control@bridge.bellsouth.com [mailto:Change.Control@bridge.bellsouth.com]

Sent: Friday, May 09, 2003 4:44 PM
To: Seigler, Bernadette M (Bern), CSLSM

Subject: BellSouth Response to AT&T's concerns re: UNE to UNE Bulk Migrations

<< File: BellSouth >> << File: U2U.DOC >>